National Park Service U.S. Department of the Interior

Big Cypress National Preserve Florida



ENVIRONMENTAL ASSESSMENT Tamiami Trail Welcome Center August 2003





Environmental Assessment

August 2003

Tamiami Trail Welcome Center

Big Cypress National Preserve

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PURPOSE OF AND NEED FOR THE ACTION

PURPOSE

The National Park Service (NPS) is considering constructing the Tamiami Trail Welcome Center located on Highway 41 near the west entrance to Big Cypress National Preserve (Preserve), Collier County, Florida. Funding for this project has been provided by the Transportation Equity Act (TEA-21).

The purpose of the welcome center is to provide visitors with an orientation to the visitor services and amenities of the public lands of South Florida, including opportunities within the Preserve as well as Everglades National Park, Fakahatchee Strand Preserve State Park, and other regional destinations. This action is needed because Big Cypress National Preserve has not established a strong identity with the public. Visitors entering the Preserve from the west encounter little opportunity to obtain information about the Preserve and other public lands or benefit from any interpretation until they reach the Big Cypress Visitor Center at Oasis, 23 miles farther east. By that time, visitors have already passed some of the most attractive views and experiences the Preserve has to offer. There is also a need to provide visitors with an orientation to visitor services and amenities on all public lands of South Florida. This is especially important in light of the fact that 75% of all visitors to Big Cypress are from out of state (Meehan 1999).

Data available from the NPS indicates a steadily increasing trend of recreational visitors to Big Cypress National Preserve from 1989 to 2000. However, in 2001 there was a decrease in visits, possibly due to the events of September 11, 2001.

Few services are currently provided for the general public in the Preserve. Means of public access into the backcountry are limited, and there are few opportunities for general visitors to learn about and appreciate the unique resources found in the Preserve (NPS 1991). Several wildlife conservation goals established by federal and state wildlife agencies involve public education and information (USFWS 1999). Currently, there is no facility, with the exception of the Big Cypress Visitor Center at Oasis located 23 miles away, providing this type of resource education information available on the west side of the Preserve.

This environmental assessment (EA) analyzes the impacts on the human environment of three alternatives, including the no-action alternative, the preferred alternative and alternative 3. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9), the NPS Director's Order No. 12 (DO-12), and the National Historic Preservation Act of 1966 (as amended).

BIG CYPRESS NATIONAL PRESERVE LEGISLATIVE HISTORY

Big Cypress National Preserve was established "to assure the preservation, conservation, and protection of the natural, scenic, hydrologic, floral and faunal, and recreational values of the Big Cypress Watershed in the state of Florida and to provide for the enhancement and public enjoyment thereof" (PL 93-440 1974). The enabling legislation states that the Preserve, as a unit of the national park system, is to be managed in a

manner that will ensure its "natural and ecological integrity in perpetuity." The legislation further states the management of the area should be in accordance "with the provisions of the Act of August 25, 1916 (NPS Organic Act)." Thus, the natural and ecological integrity of the Preserve is the fundamental value that Congress directed the NPS to protect.

In April 1988, PL 93-440, An Act to Establish Big Cypress National Preserve, was amended by PL 100-301, The Big Cypress National Preserve Addition Act. The Preserve addition was comprised of 146,000 acres and was designated as the "Big Cypress National Preserve Addition".

PURPOSE AND SIGNIFICANCE OF THE PRESERVE

Big Cypress National Preserve was established "to assure the preservation, conservation, and protection of the natural, scenic, hydrologic, floral and faunal, and recreational values of the Big Cypress Watershed in the state of Florida and to provide for the enhancement and public enjoyment thereof" (PL 93-440 1974).

Big Cypress National Preserve, including the addition, contains vestiges of primitive southwest Florida. It is significant as a unit of the national park system because it

- is a large wetland mosaic that supports a vast remnant of vegetation types found only in this mix of upland and wetland environments
- contains the largest stands of dwarf cypress in North America
- is habitat for the Florida panther and other animal and plant species that receive special protection or are recognized by the state of Florida, the U.S. government, or the Convention on International Trade in Endangered Species
- provides opportunities for the public to pursue recreational activities in a subtropical environment
- is home to the Miccosukee Tribe of Indians of Florida and Seminole Tribe of Florida and sustains resources that are important to their cultures
- is a watershed that is an important component to the survival of the greater Everglades ecosystem

PROJECT BACKGROUND

Project Planning

The General Management Plan (GMP) for Big Cypress National Preserve was completed in 1991. The GMP provides guidance on visitor use, natural and cultural resource management, and general development within the original boundary of the Preserve for the future. The selected alternative proposed a visitor center at the Headquarters of the Preserve (NPS 1991).

According to the GMP, visitor use would focus on interpretation and recreational activities. Interpretation would consist of information and educational programs for visitors as they arrived at the Preserve, trip planning assistance inside the Preserve, and onsite interpretive exhibits and trails. Present recreational activities would continue to be available, subject to appropriate restrictions to ensure the protection of fragile

resources. These activities would include hunting, camping, possible additional canoeing opportunities, hiking, and picnicking. Permitting information for off-road vehicles (ORVs) and hunting would be available. Concessioners could provide additional services, such as hunting guides and tours.

The NPS decided not to locate the proposed welcome center within the Headquarters building because the proposed center space was needed for additional Preserve staff. It therefore became logical to the Park Service to propose to separate the administrative facilities from the visitor service facilities. This physical separation would allow for increased visitor service benefits in terms of access, circulation, and safety. Therefore, the Park Service considered two locations for the proposed welcome center. Both locations being considered are located within areas zoned for NPSdevelopment in the preserve's general management plan (NPS, 1991)

In 1999, the Florida Department of Transportation (FDOT) pledged \$2.1 million to Big Cypress National Preserve for the purpose of constructing a Tamiami Trail Welcome Center. The original site considered for this facility was at the intersection of Highways 41 and 29. However, the existing buildings at that site are currently under lease until 2014 to the Everglades City Chamber of Commerce and the Collier County Sheriff. Site improvements including picnic shelters, information kiosks, and paving were included in Visitor Safety Highway Improvements currently being constructed in the Preserve.

Since the leases could not be terminated, the NPS has therefore decided to proceed with considering development of a welcome center at an alternate site and proposed improvements at the Chamber of Commerce site have been deleted from Visitor Safety Highway Improvements. The FDOT transferred the funds to the Preserve in May 2000. A design charette was held at the Preserve in June 2000 to develop schematic concepts for both site and building design.

According to the GMP, concessions operations were proposed to be based at Sea Grape Drive, one of the locations being considered for the welcome center. The placement of the welcome center at this location would not preclude the Park Service from placing concession operations at this location at a later date. The site would still have adequate space to be considered for concession operations if the NPS determined them to be economically feasible at that location. Prior to any concession operations, an environmental analysis will be conducted, including an opportunity for public comments.

If the Park Service determined that concession operations were feasible, the operations would be offered first to the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida, in accordance with the Preserve's enabling legislation.

Design Charette and Value Analysis

A design charette was held in June 2000. The selected design includes three buildings, an orientation building, a multipurpose building and a building with restrooms. The orientation building is proposed to showcase both permanent and traveling exhibits. A small sales area would offer publications provided by the Florida National Parks and Monuments Association. A multipurpose building is proposed to function primarily as an audiovisual room for visitors and as a meeting room to be used by the Preserve and other organizations and agencies in the region. The third proposed building would house restrooms.

An interdisciplinary team conducted a value analysis study in June 2000 to select the building floor plan and elevation. Four building floor plan alternatives were considered. A second value analysis study was conducted to select the site layout. Four site plan alternatives were evaluated during the second value analysis study (NPS 2000). The selected design is the preferred the preferred alternative in this environmental assessment.

Scoping

Scoping is an early and open process to determine the breadth of environmental issues and alternatives to be addressed in an environmental assessment. The Park Service conducted both internal scoping with appropriate NPS staff and external scoping with affected groups and agencies.

Internal scoping was conducted at the Preserve in June 2000 to develop schematic concepts for both site and building design. Scoping letters were mailed to the following areas in November and December 2002 and early January 2003:

Biscayne National Park	Rookery Bay National Estuarine Research Preserve
Collier-Seminole State Park	Seminole Tribe of Florida
Everglades National Park	Southeast Archeological Center
Fakahatchee Strand Preserve State Park	South Florida Ecological Services Office, U.S. Fish & Wildlife Service
Florida Panther National Wildlife Refuge	State Historic Preservation Officer
Florida State Clearinghouse, Florida Dept. of Community Affairs	U.S. Army Corps of Engineers, Jacksonville District
Miccosukee Tribe of Indians of Florida	U.S. Department of Transportation
Picayune Strand State Forest	U.S. Environmental Protection Agency, South Florida Office

Comments were solicited during external scoping until January 2003. Ten responses were received, all supportive of the proposed action. Responses to the external scoping are presented as appendix A.

This project has been regularly discussed in meetings with various organizations, such as the Tamiami Trail Scenic Highway Corridor Management Entity Committee, Everglades Chamber of Commerce, and the Everglades Coordinating Council. The project has also been discussed with various individuals interested in preserve management.

LEGISLATIVE MANDATES AND SPECIAL COMMITMENTS

Legislative mandates and special commitments include those measures that apply to the entire Park Service, plus Preserve-specific requirements. In addition, visitor use in Big Cypress National Preserve must comply with all federal statutes, executive orders, and NPS policies.

The intent of all the mandates and commitments is to establish sustainable conservation and to avoid impairment of NPS lands and resources. As a result, visitor use can occur only to the extent that it does not significantly adversely impact the Preserve and its natural and cultural resources.

The Park Service and its mandates are authorized under the NPS Organic Act (16 USC 1, 2-4) and the General Authorities Act (16 USC 1a8). These acts direct the agency to conserve the scenery, the natural and historic objects, and the wildlife, and to provide for the enjoyment of those resources in such a manner as to leave them unimpaired for future generations. Amending the NPS Organic Act of 1916, the Redwood Act (March 27, 1978, 16 USC 1a1) was passed shortly after Big Cypress National Preserve was established, with complete knowledge of how the Act would affect such units as Big Cypress. In this act, Congress reaffirmed the mandates of the Organic Act and provided additional guidance on national park system management: "The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established." In implementing this proposal, the NPS would comply with all applicable laws and executive orders, including the following:

Special Status Species

Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 USC 1531 et seq.), requires all federal agencies to consult with the U.S. Fish and Wildlife Service (FWS) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. The NPS has been informally consulting with the FWS and will continue to comply with the requirements of ESA on this project.

Floodplains and Wetlands Management

Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands) directed federal agencies to avoid development in floodplains and wetlands whenever there is a practicable alternative and to avoid, to the extent possible, adverse impacts associated with the occupancy or modification of floodplains and wetlands.

The NPS has identified certain classes of actions which required modified approaches to achieve the objectives of Executive Order 11988 to assist the agency with meeting its environmental compliance issues while meeting the needs for park visitors and management actions. Small parking lots and boardwalks for use of the project area are excepted actions from this Executive Order. However, to be in compliance with this Executive Order, the NPS will provide for proper floodplain protection through the engineering design of the parking areas and boardwalks.

The welcome center proposed by this document is in conformance with Executive Order 11990. Executive Order 11990 requires federal agencies to avoid, where possible, adversely impacting wetlands. In all practicable cases avoidance of wetland areas and communities would be required. In conformance with the DO #77-1: *Wetland Protection*, a Statement of Findings (SOF) must be prepared to document the rationale for locating the welcome center structures and facilities within a wetland. Therefore, if the chosen alternative results in the placement of the welcome center within a wetland

area, a SOF will be prepared and the public would be given the opportunity to review and provide comments. The SOF will provide the rationale for actions proposed within the impacted areas of Big Cypress National Preserve. Furthermore, approval of the SOF by the NPS Southeast Regional Director is required before implementation of a chosen alternative within a wetland area may proceed.

Water Quality

Regulations implementing Section 404 of the Clean Water Act (33 USC 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 USC 401 et seq.) are administered by the U.S. Army Corps of Engineers (ACE), which issues permits for work affecting navigable waters and wetlands of the United States. A permit application will be made to the Corps of Engineers for proposed activities that are regulated by that agency in conformance with Section 404 of the Clean Water Act.

Under the State of Florida designation of Outstanding Florida Waters, no degradation of water quality, other than that allowed in Rule 62-4.242(2) and (3), F.A.C., is to be permitted.

If any unknown hazardous waste is found in areas proposed for development or visitor use, the NPS would comply with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (42 USC 9601 et seq.) to determine if resources are being polluted by the substance or if it presents a health and safety issue. If any excavated material is determined to be hazardous, the NPS would comply with the Resource Conservation and Recovery Act (RCRA) (42 USC 6901 et seq.).

Construction of buildings, associated amenities and facilities could affect water quality through the increasing of impervious surface for parking lots and buildings. Because the actions proposed may affect the surface waters of Florida, permit approval must be obtained from the Florida Department of Environmental Protection (FDEP) and/or the South Florida Water Management District. A permit application will be completed for those activities that require evaluation by these agencies. Rule 62-621.300 (5) Florida Administrative Code (F.A.C.), Multisector Generic Permit for Stormwater Discharge Associated with Industrial Activity, which is effective April 1, 2003, requires an Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System Notice of Intent (NPDES NOI) to be submitted to FDEP for construction activities of one acre or larger. As part of this submittal, a Storm Water Pollution Prevention Plan (SWPPP) is required to be developed and implemented prior to any ground-disturbing activities. SWPPP is the guiding tool for the prevention, minimization, and mitigation of soil erosion and water pollution prevention during construction activities.

Cultural Resources

The NPS is mandated to preserve and protect its cultural resources through the Organic Act of August 25, 1916, through specific legislation such as the Antiquities Act of 1906, the National Environmental Policy Act of 1969 (as amended), the National Historic Preservation Act of 1966, NPS *Management Policies*, the *Cultural Resources Management Guideline* (DO-28), and the Advisory Council on Historic Preservation's implementing

regulations regarding "Protection of Historic Properties" (36 CFR 800). Other relevant policy directives and legislation are detailed in DO-28.

This environmental assessment will be forwarded to the Florida State Historic Preservation Officer (SHPO) for review and comment and for concurrence with the NPS' determination that the proposed action would not adversely affect properties on or eligible for the National Register of Historic Places. A courtesy copy will be forwarded to the Advisory Council on Historic Preservation.

The areas proposed for development (the area of potential effect) have been surveyed for cultural resources and none were discovered. In the unlikely event that buried human remains or other items of archeological significance are discovered during project development, work would stop and the NPS would begin consultations under the National Historic Preservation Act and the Native American Graves Protection and Repatriation Act.

ISSUES AND IMPACT TOPICS

Issues

Issues and concerns affecting this proposal were identified from past NPS planning efforts and input from environmental groups and state and federal agencies. The major issues are

- the lack of an orientation facility near the western entrance of the Preserve
- conformance of this proposal with the Big Cypress National Preserve GMP, including potential impacts to water quality, floodplains, wetlands, vegetation, wildlife, threatened and endangered species, visitor use and experience, socioeconomic environment and transportation

Derivation of Impact Topics

Specific impact topics were developed for discussion focus, and to allow comparison of the environmental consequences of each alternative. These impact topics were identified based on federal laws, regulations, and Executive Orders; 2001 NPS *Management Policies*; and NPS knowledge of limited or easily impacted resources. A brief rationale for the selection of each impact topic is given below, as well as the rationale for dismissing specific topics from further discussion.

IMPACT TOPICS INCLUDED IN THIS DOCUMENT

Water Quality

Construction of buildings and associated amenities and facilities could affect water quality through the increasing of impervious surface for parking lots and buildings. For this reason, water quality is an impact topic that will be analyzed in this document.

Floodplains

All of Big Cypress National Preserve is within the 100-year floodplain according to the Federal Emergency Management Agency (FEMA). For this reason, floodplains are an impact topic that will be analyzed in this document.

Wetlands

Both locations proposed for the welcome center were filled prior to the lands being added to the Preserve. The sites do, however, include wetland areas as defined by federal or state law. This project has the potential to impact wetlands.

Vegetation

Effects on vegetation are analyzed in this document, because construction of buildings and associated amenities and facilities can destroy plants and trees and create openings for invasive plants.

Wildlife

One or more alternatives could potentially affect the quality of the wildlife habitat or directly disturb individual animals located in the Preserve, so this topic is included for analysis.

Special Status Species

Two endangered species, the wood stork (*Mycteria americana*) and the West Indian manatee (*Trichechus manatus*) are the two special status species that are known to inhabit one or both of the proposed locations of the welcome center.

Visitor Use and Experience

Visitor use would be affected by implementation of any of the alternatives, so this topic is included for analysis. Factors that affect visitor experience are safety, scenery, quality of experience, educational and cultural resources and traffic. One or more alternatives could affect fishing; therefore, this topic will be included as part of visitor use and experience.

Socioeconomic Environment

The socioeconomic environment, including employment, occupation, income changes, tax base, infrastructure, etc., may be affected. Adjacent property owners, adjacent to the Preserve boundary, may be affected by one or more alternatives. The proposal could also affect the economy of the area. These topics are closely related and have been combined for analysis in this document.

Transportation

One or more alternatives could affect vehicular traffic patterns; therefore, this topic will be included as an impact topic.

IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS

Several potential impacts were dismissed because they would not be affected or the potential for impacts under all alternatives would be negligible. These topics are listed below with an explanation of why they were not considered in detail.

Special Status Species (other than the manatee and wood stork)

The U.S. Fish and Wildlife Service (USFWS) indicated 10 species on the federal threatened and endangered species list that inhabit the Big Cypress National Preserve (personal communication Deborah Jansen, 2003). Of these, the American alligator is listed only because of similarity of appearance to the American crocodile and seven species have either not been documented in the proposed construction sites, or there is no suitable habitat. Based on this information, the American alligator, eastern indigo snake, Cape Sable seaside sparrow, bald eagle, red-cockaded woodpecker, snail kite, Florida panther, and mountain lion were dismissed from detailed analysis in this document.

The Florida Fish and Wildlife Conservation Commission (FWC) lists seven additional species as threatened or endangered within the Preserve: the white-crowned pigeon, arctic peregrine falcon, Florida sandhill crane, least tern, everglades mink, Big Cypress fox squirrel, and Florida black bear. These species have either not been documented at this location, the sites do not provide suitable habitat, or the impacts associated from the construction of the facility are expected to be negligible. Therefore, the impacts to these species will not be further analyzed in this EA.

Wilderness, Wild and Scenic Rivers

These are congressionally designated areas and do not exist in the area of concern of this EA. Because these areas do not exist in the area of concern, this topic was dismissed from further consideration.

Cultural Resources

The 1966 National Historic Preservation Act (NHPA, 16 USC 470 et seq.), the 1916 NPS Organic Act, and NPS planning and cultural resource guidelines call for the consideration and protection of historic properties in development proposals (The term historic properties refers to all cultural resources, including prehistoric archeological sites, cultural landscapes, ethnographic sites, and historic sites eligible for or listed on the National Register of Historic Places). The evaluation of potential impacts of proposed actions on significant historic properties is required by NEPA and NHPA, as is attention to the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) for sites where human remains or burials may be present.

The area of potential effect would be restricted to areas shown on the project plans. No new disturbance would occur outside this area. Vehicle storage, staging areas, and turnaround areas would be located in areas devoid of significant archeological, historical, and ethnographic resources. Because of the nature of the terrain and the amount of past disturbance, the potential for encountering cultural resource sites within the project area is extremely low. Nevertheless, stop-work provisions and other protective measures would be included in the project contract documents.

If previously unknown and significant archeological resources are unearthed during construction, work would be stopped in the area of the discovery and the NPS would be contacted. The Park Service would consult with the Florida State Historic Preservation Officer (SHPO) and, as appropriate, the Advisory Council on Historic Preservation. If impacts to significant resources could not be avoided by redesign, mitigating measures would be developed in consultation with the SHPO to help ensure that the informational

significance of the sites would be preserved. If appropriate, provisions of the Native American Graves Protection and Repatriation Act of 1990 would be implemented.

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, *Assessment of Adverse Effects*), the NPS concludes that implementation of either of the action alternatives described in this document would result in a "no historic properties affected" determination. This is due to the fact that no cultural resources are known to exist in the project areas. In addition, the SHPO has stated, in response to the scoping letters, dated October 31, 2002, that there are no historic properties in the area of potential effect. Because the SHPO has stated that there are no historic properties in the area of potential effect, this topic was dismissed from further consideration.

Prime or Unique Farmlands

The Farmland Protection Policy Act and the U.S. Department of the Interior require an evaluation of impacts on prime or unique agricultural lands. These lands require certain soil types and water availability. According to the U.S. Department of Agriculture, Natural Resources Conservation Service office located in Naples, Florida, there are no prime or unique farmlands within the areas proposed for the welcome center (personal communication Anthony Polizos, USDA 2003).

Soils

There will be no adverse impact to native soils if any of the alternatives are selected, because the proposed project would be constructed on sites that were filled prior to the establishment of the Preserve. Therefore, this topic was dismissed from further consideration.

Air Quality

The 1963 Clean Air Act, as amended (42 U.S.C. 7401 et seq.), requires federal land managers to protect air quality, while the 2001 NPS *Management Policies* address the need to analyze air quality during park planning. Big Cypress National Preserve is a Class II area under the Clean Air Act. The Preserve is currently within a designated attainment area, meaning that concentrations of criteria pollutants are within standards.

Should an action alternative be selected, local air quality would be temporarily affected by dust and vehicle emissions. Hauling material and operating construction equipment would result in increased vehicle emissions. Volatile organic compounds, ozone, carbon monoxide and sulfur dioxide emissions would generally disperse quickly from the construction area. This would last only as long as construction activities occurred and would have a negligible effect on regional pollutant levels.

Fugitive dust plumes from construction equipment and vehicle traffic would intermittently increase airborne particulate concentrations in the area near the project site, depending on soil moisture. This dust would be temporary, highly localized and have a negligible effect on regional particulate levels. In addition, best management practices (BMP's) to control dust will be required during construction.

In summary, if an action alternative is selected, local air quality in the immediate vicinity could be temporarily degraded by dust generated from site reconstruction activities and emissions from construction equipment and vehicles. There may be increased

automobile emissions from vehicles using the site, but neither overall Preserve nor regional air quality would be more than negligibly affected. For these reasons, air quality was dismissed as an impact topic in this document.

Soundscapes

Analysis of potential impacts to natural soundscapes is required by NPS *Management Policies*. Because the proposed sites are along a major highway and in a semi-developed area, the action alternatives would not affect the soundscape of the area. Because the action alternatives would not affect the area soundscape, this topic was dismissed from further consideration.

Night Sky

It is NPS policy to preserve opportunities for visitors to have an unobstructed view of the night sky. Artificial light pollution can affect this opportunity. Outdoor lighting in the action alternatives would be designed so that it would be directed toward the ground and would not scatter in order to prevent light pollution.

Mineral Resources

No claims for locatable, leaseable or saleable mineral resources are near the proposed locations; therefore, this topic will not be considered further.

Indian Trust Lands

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes. There are no Indian trust resources in Big Cypress National Preserve. The lands comprising Big Cypress National Preserve are not held in trust by the secretary of the interior for the benefit of the Indians due to their status as Indians. Therefore, Indian trust resources were dismissed as an impact topic.

Urban Quality and Design of the Built Environment

Consideration of this topic is required by 40 CFR 1502.16. Urban area quality and vernacular designs will be taken into consideration in this project. Because this topic will be incorporated in the design, this topic was dismissed from further consideration.

Energy Requirements and Conservation Potential

Alternatives 2 and 3 would result in a new facility with inherent energy needs that would require an increase in energy consumption. The alternatives would not have appreciable effects on energy availability or costs in the region. Because there would not be appreciable energy effects, this topic was dismissed from further consideration.

Private Property

Alternatives 2 and 3 would result in a new facility without any impact to private property. Because there would not be any impact to private property, this topic was dismissed from further consideration.

Environmental Justice

Executive Order 12898 requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects on minorities or low income populations or communities. The preferred alternative is not expected to cause adverse health or environmental impacts to minorities, low-income populations, or communities and so this topic will not be considered further.

Coastal Zone Management

In accordance with the Coastal Zone management Act, federal projects must be consistent with the State of Florida's Coastal Zone Management Plan. Through consultation with the state of Florida, it was determined that the proposed project was determined to be consistent (see appendix A). Therefore coastal zone management was dismissed as an impact from further analysis.

DESCRIPTION OF ALTERNATIVES

This section presents three alternatives — a no-action and two action alternatives. The no-action alternative is required by the National Environmental Policy Act and serves as a baseline for comparison. The action alternatives have the same major components: orientation/information building, multipurpose/audiovisual building, and comfort station. The primary difference between alternatives 2 and 3 is the location of the project (see Location map). Both alternatives 2 and 3 would also include the mitigating measures following the detailed description of the alternatives.

Alternatives 2 and 3 subscribe to and support the practice of sustainable planning, design, and use of the facility. The NPS has adopted the concept of sustainable design as a guiding principle of facility planning and development. The objectives of sustainability are to design Preserve facilities to minimize adverse effects on natural and cultural values, to reflect their environmental setting, and to maintain and encourage biodiversity; to construct and retrofit facilities using energy-efficient materials and building techniques; to operate and maintain facilities to promote their sustainability; and to illustrate and promote conservation principles and practices through the sustainable design and ecologically sensitive use. Essentially, sustainability is living within the environment with the least impact on the environment.

ALTERNATIVE 1 - NO ACTION (CONTINUE CURRENT MANAGEMENT)

Under this alternative, a new welcome center would not be constructed. Existing uses of the area and current conditions would continue as they are under current management. Visitors entering the Preserve from the west may not realize they are in the Preserve. They would not have the opportunity to obtain information, participate in educational experience, or benefit from any interpretation experience unless they stop at the Big Cypress Visitor Center at Oasis 23 miles to the east. By that time, visitors have already passed some of the most attractive views the Preserve has to offer.

In the no-action alternative, the Park Service would respond to future needs and conditions associated with visitor experience without major actions or changes in current management. No action does not imply or direct discontinuing any present actions or removing existing uses, developments, or facilities.

Vegetation on the sites would continue to be mowed regularly by the NPS in an attempt to control the spread of exotic plants. Visitor use of the sites would continue in the same manner and level as it is currently.

ALTERNATIVE 2 - PREFERRED ALTERNATIVE

This alternative would involve the design and construction of a new welcome center on Sea Grape Drive. The new welcome center would be constructed and operated while protecting undisturbed natural and cultural resources. Actions described in the preferred alternative are not in conflict with the approved 1991 GMP or related Preserve documents.

Key features of the preferred alternative include the following:

- A new welcome center to serve visitors on the west side of the Preserve.
- Public restrooms, outdoor viewing platforms, and a footbridge over a canal.
- Opportunities to provide the public with important South Florida education, orientation, and interpretation experience.
- Opportunity to provide educational experiences.

The site of the preferred alternative is on federal land located south of Highway 41 approximately $2\frac{1}{2}$ miles from the western Preserve boundary within the Stairsteps Management Unit of the Preserve (see Preferred Alternative map). It is located on the western edge of the disturbed area that includes the Preserve headquarters and maintenance yard in Township 52 South, Range 30 East, Section 33. Staff housing and the maintenance yard are just south of the property. An important factor in selection of this site is that it was filled prior to establishment of the Preserve in 1974. Additionally, the site is located on a major travel route (U.S. Highway 41, the Tamiami Trail) and includes a canal that connects to the Gulf of Mexico and is frequented by various wildlife for visitors to view, including manatees, alligators, fish, and birds. Access to the site is from Sea Grape Drive, which also leads to a canoe launch.

Proposed development would involve approximately 4 acres (see the Preferred Alternative map). The proposed welcome center includes the design of three buildings: a 2,100 square-foot orientation/information building, a 1,500 square-foot multipurpose/audiovisual building, and a comfort station. The orientation/information building, staffed by one to three persons, would showcase both permanent and traveling exhibits. A small sales area would offer publications provided by the Florida National Parks and Monuments Association. Office space, workspace, and storage would be provided in the back of the building with space for five employees. The multipurpose/audiovisual building would function primarily as an audiovisual room for visitors; however, the building would also be used for staff meetings or for community events. The building would also include a small kitchen area and space to store chairs and tables. The comfort station would be 900 square feet and would house both men's and women's restrooms.

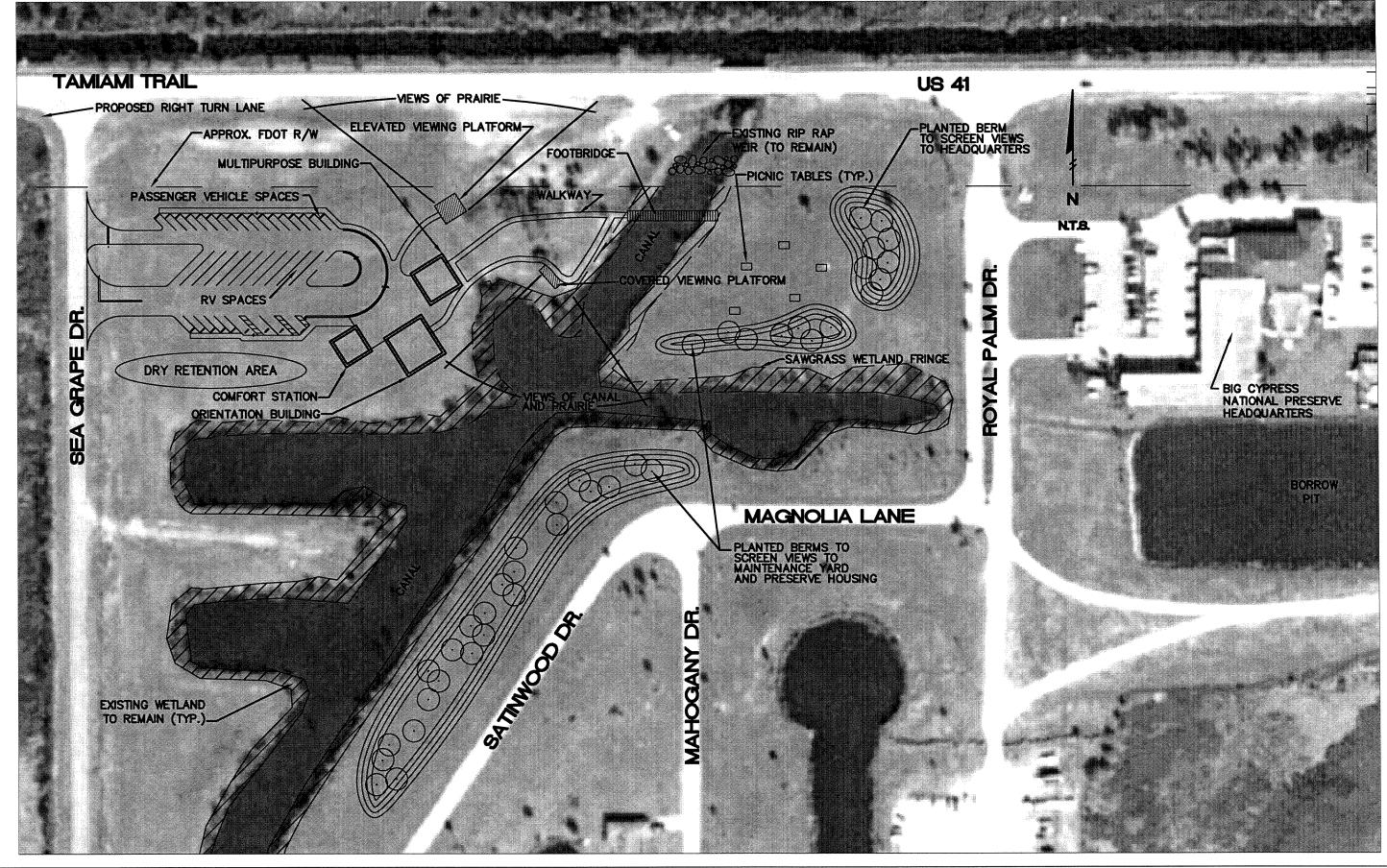
The proposed welcome center would serve as a primary contact for visitors to the western part of the Preserve and provide orientation to the South Florida area. The purpose of the welcome center would be to disseminate information on South Florida and provide an initial connection between visitor and resource. This center would be operated in association with the existing Big Cypress Visitor Center at Oasis. The Big Cypress Visitor Center at Oasis would remain open and serve as a source of in-depth information and interpretation on the resources specific to the Preserve.

Construction plans would include a surfaced parking lot with spaces for 25-30 passenger vehicles and up to 10-15 RVs or buses. The plans would also include a footbridge over the canal and picnic tables. The footbridge and tables would be connected by approximately 700 feet of walkway. Plantings of native species for screening would also be provided and landscaping would also be native.





JUL - 2 2003 DSC-PSD



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TAMIAMI TRAIL WELCOME CENTER PREFERRED ALTERNATIVE SITE LOCATION

DATE: 06/05/03 LAA CWI NO: 22145.00

FIGURE 2

Boardwalks would be designed as meandering rather than straight-line features. Each boardwalk would be designed specifically for each site to avoid large trees and other features and to be nonrestrictive to surface water flow. Picnic tables and most of the walkways would be constructed of recycled material, which is longer-lived and more environmentally sustainable than treated lumber.

Additional construction would be needed to install utilities (water, sewer, power, telephone) and road access improvements. Utilities would be connected to existing supply lines. Mitigation measures specify these power and telephone lines to be buried, if feasible. If this is not feasible, then utility poles would need to be installed. A right turn/deceleration lane would be constructed by the FDOT on the eastbound lane within the existing right-of-way of Highway 41 for the safety of travelers entering and exiting the welcome center.

The site of the proposed action is entirely within the 100-year floodplain determined by the Federal Emergency Management Agency (FEMA). The building floors of the welcome center would be elevated above the 100-year floodplain. In addition, all construction for the footbridge would be placed on land and would not impact the canal. The footbridge would also be located to avoid any impacts to existing wetlands along the canal.

The location and site design of the preferred alternative were chosen through a Value Analysis Study. Value Analysis is a problem-solving and decision-making technique to achieve all required functions at the least cost over the life of the facility. It is an interdisciplinary team effort that takes into consideration natural, cultural and visitor-related values as well as costs. When the value analysis methodology is followed, beneficial results are ensured. Several site locations were considered during this study, and this location was chosen as the best because of its wildlife observation opportunities, previously disturbed condition, proximity to Preserve headquarters, visitor safety, and visibility of the welcome center to motorists using U.S. Highway 41 (Tamiami Trail).

The estimated cost would be \$1,924,000.

ALTERNATIVE 3 - ALTERNATE LOCATION

The site of alternative 3 is located on federal land south of Highway 41 approximately 2 ¾ miles from the Preserve's western boundary within the Stairsteps Management Unit of the Preserve (see Alternative Site map). It is located on the eastern edge of the disturbed area that includes the Preserve headquarters in Township 52 South, Range 30 East, Section 33. An important factor in selection of this site is that it was previously filled and disturbed prior to establishment of the Preserve in 1974. Additional site factors are that it is on a major travel route (U.S. Highway 41, the Tamiami Trail). The site is located adjacent to a borrow pit.

Proposed development would involve approximately four acres. The number, design, and functions of the proposed buildings would be identical to the Preferred Alternative. Construction plans include a surfaced parking lot with spaces for 25-30 passenger vehicles and 10-15 RVs or buses. Plantings of native species for screening would also be provided and landscaping would also be native.

The site of this alternative is entirely within the 100-year floodplain as determined by FEMA. The building floors of the welcome center would be elevated above the 100-year floodplain. The site is surrounded by wetland areas just south of U.S. 41, east of the evaporation/percolation pond and south of the borrow pit. The conceptual site plan as shown in Figure 3 poses several distinct design challenges that require special consideration. Contained within the overall project site is approximately ½ acre of wetlands, an evaporation/percolation pond for the headquarters wastewater treatment plant, and a heliport pad.

Design of the welcome center on this site would impact an isolated wetland area. In addition, South Florida Water Management District rules would require placement of any dry detention stormwater retention facility at least 100 feet from the evaporation/percolation pond. Finally, placement of the welcome center near the wastewater evaporation/percolation pond would pose several safety concerns for the potential interaction of visitors with the evaporation/percolation pond and/or heliport.

The estimated cost for this alternative would be \$1,891,000.

MITIGATING MEASURES

Mitigation would tend to reduce the negative impacts of a particular action. The Council on Environmental Quality (CEQ) regulations calls for a discussion of the "appropriateness" of mitigation and NPS Director's Order No. 12, *Conservation Planning, Environmental Impact Analysis, and Decision-making*, requires an analysis of the effectiveness of mitigation.

Mitigation for NEPA purposes in this EA is based on the avoidance of adverse effects or application of one or more standard mitigation measures. These measures would be included in alternatives 2 and 3.

- All structures would be constructed on existing fill in order to raise building elevations above the average high water level as per State of Florida.
- All building floors would be elevated above the 100-year floodplain elevation.
- No dredging or other alteration of existing waterways would be required. If alternative 2 is selected, design and construction of the pedestrian bridge would be completed without impacts to wetlands, construction within the canal or impacts to the existing waterway.
- Silt fence and/or other Best Management Practices BMP's would be utilized to prevent introduction of sediments into the waterway and wetlands during construction.
- Following NPS policies, all buildings would be universally accessible and constructed utilizing environmentally sustainable design principles. Recycled materials would be used wherever feasible.
- Utility lines would be buried, if possible. If burying is not possible, the lines would be placed where they would cause the least impacts to scenic viewsheds, especially those from the viewing platforms.

Received

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ARCHITECTS PROGRAM
DESIGN - BUILD MANAGERS

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TAMIAMI TRAIL
WELCOME CENTER

ALTERNATE SITE LOCATION

DATE: 06/05/03 LAA CWI NO: 22145.00

FIGURE 3

- Outdoor lighting would be installed so that it is directed toward the ground and does not scatter to affect night sky viewing opportunities.
- Any revegetation or other plantings would use native species from genetic stocks originating in or near the Preserve.
- Stormwater detention basin(s) would be constructed before other construction to prevent runoff from the site entering a waterway. These would be designed to comply with South Florida Water Management District (SFWMD) requirements and any necessary permits would be acquired.
- BMP's would be used to minimize any spills or leaks of petroleum products from construction activities. To further minimize the potential, equipment would be checked daily to identify and repair any leaks.
- In the unlikely event that construction should unearth previously undiscovered archeological resources, work would be stopped in the area of discovery and the Preserve would consult with the SHPO and the Advisory Council on Historic Preservation, as necessary, according to §36 CFR 800.13, Post Review Discoveries. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) would be followed.
- The NPS would ensure that all contractors and subcontractors are informed of the penalties for illegally collecting artifacts or intentionally damaging archeological sites or historic properties. Contractors and subcontractors would also be instructed on procedures to follow in case previously unknown archeological resources are uncovered during construction. Equipment traffic would be minimized in the area of the site, and staging areas for equipment and materials would be located to avoid known archeological resources.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

NPS policy requires the identification of an environmentally preferred alternative to aid NPS decision-makers in choosing among the alternatives. The environmentally preferred alternative is the alternative that will promote the national environmental policy as expressed by NEPA. This includes alternatives that

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations
- (2) assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings
- (3) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences
- (4) preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice
- (5) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources

Alternative 1 (No Action) does not meet the management prescriptions of the Preserve as described in the GMP. In addition, this alternative does not realize provisions 1, 2, 3, 4, 5, or 6 of the national environmental policy goals. Although alternative 1 would not create any additional disturbance, the existing unnatural conditions would prevail without providing benefits to natural or visitor-related values.

Alternative 2 (Preferred Alternative) strives to integrate the GMP goal to "protect and enhance natural resources," and the goal to "provide diverse recreational and educational experiences." Through the use of the native species plantings and its information and education emphasis, alternative 2 would closely realize provisions 2, 3, and 5 of the national environmental policy goals. In addition, this alternative would realize provisions of goal 1 by improving the existing conditions of the site and provisions of goal 6 by using recycled materials in the construction of the welcome center.

Alternative 3 (Alternate Location) would not realize provisions 2, 3, or 5 of the national environmental policy goals. In addition, isolated wetland areas would be impacted by alternative 3. The evaporation/percolation pond could pose a health, safety, and aesthetic concern because chlorinated effluent is discharged to the ground in this location. In addition, a heliport would pose a safety and noise concern because it would be so close to the proposed welcome center. This alternative location would also have shared access with headquarters and Preserve maintenance traffic, thereby potentially creating security and control problems.

After review, the NPS determined that the environmentally preferred alternative is Alternative 2. Alternative 2 surpasses alternative 3 because of the educational benefits to visitors associated with the waterway; minimal impact to wetlands, nonexistence of shared administrative and public traffic, no evaporation/percolation pond, and no heliport. Alternative 2 (a) assures for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings; (b) attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences; and (c) achieves a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.

ALTERNATIVES CONSIDERED BUT DISMISSED

As part of the Value Analysis Study, the study group considered a possible joint operation with the existing Everglades City Chamber of Commerce welcome center near the western boundary of the Preserve at the intersection of U.S. 41 and SR 29 at Carnestown. This would have resulted in the construction of a new building, which would have included adequate space to incorporate the Everglades City Chamber of Commerce. However, the Chamber was not interested in such a joint use partnership. In addition, the existing Chamber of Commerce building is under lease to the Chamber until 2014, and therefore this alternative site was dismissed from further consideration.

Table 1: Comparison of Alternatives

Імраст Торіс	ALTERNATIVE 1: NO	ALTERNATIVE 2:	ALTERNATIVE 3: ALTERNATE
	ACTION	PREFERRED ALTERNATIVE	LOCATION
Description	Welcome center is not constructed	Welcome center is constructed, consisting of an approximately 2,100 square-foot orientation/information building, 1,500 square-foot multi-purpose/audiovisual building, 900 square-foot comfort station, footbridge over the canal, and parking.	Welcome center is constructed, consisting of an approximately 2,100 square-foot orientation/information building, 1,500 square-foot multipurpose/audiovisual building, 900 square-foot comfort station, and parking.
Location	Not applicable	Located west of Preserve Headquarters, at the intersection of U.S. 41 and Sea Grape Drive. This location would provide the best visibility for eastbound vehicles from Highway 41.	Located immediately east of Preserve Headquarters. This location is not as visible.
Access	Not applicable	Sea Grape Drive would be used to access the site; a right-turn lane would be constructed for eastbound traffic.	Access would be off US 41 concurrently using a new driveway to be constructed for Preserve Headquarters access.
Infrastructure	No infrastructure is constructed	Infrastructure including water, communication, and electricity are adjacent to the site. Sanitary sewer is within approximately 500' of the site.	Infrastructure including water, sanitary sewer, communication, and electricity are not immediately adjacent to the site.
Degree to which Project Objectives are met	The objectives are not met.	The objectives are met.	The objectives are not all met.
Cost	\$0	\$1,924,000	\$1,891,000

Table 2: Summary of Environmental Impacts

Table 2. Summary of Environmental Impacts			
IMPACT TOPIC	ALTERNATIVE 1- NO ACTION	ALTERNATIVE 2- PREFERRED ALTERNATIVE	ALTERNATIVE 3 - ALTERNATE LOCATION
Water Quality	No impact No cumulative impact. No impairment of Preserve resources or values	Short-term, negligible, adverse impact Long-term, moderate to minor beneficial cumulative impact No impairment of Preserve resources or values	Same as alternative 2
Floodplains	No impact No cumulative impact No impairment of Preserve resources or values	Negligible, adverse impact. Moderate beneficial cumulative impact No impairment of Preserve resources or values	Same as alternative 2
Wetlands	No impact No cumulative impact No impairment of Preserve resources or values	No impact Major cumulative beneficial impact No impairment of Preserve resources or values	Minor, long-term adverse impact Major cumulative beneficial impact No impairment of Preserve resources or values
Vegetation	No impact No cumulative impact No impairment of Preserve resources or values	Negligible direct and indirect adverse impacts from construction Negligible to minor beneficial impact; indirect beneficial impact Moderate to major beneficial cumulative impact No impairment of Preserve resources or values	Same as alternative 2
Wildlife	Negligible impact No cumulative impact No impairment of Preserve resources or values	Short-term and long-term negligible adverse impact Negligible, short-term, adverse cumulative impact. Indirect beneficial impact due to education No impairment of Preserve resources or values	Same as Alternative 2 without the opportunity to view manatees

IMPACT TOPIC Special Status Species	ALTERNATIVE 1- NO ACTION No impact No cumulative impact. No impairment of Preserve resources or values.	ALTERNATIVE 2- PREFERRED ALTERNATIVE Not likely to adversely impact manatee or wood stork. Minor to moderate beneficial cumulative impact; indirect beneficial impact due to education No impairment of Preserve resources or values	ALTERNATIVE 3 - ALTERNATE LOCATION No effect on manatee Not likely to adversely impact wood storks Minor to moderate beneficial cumulative impact; indirect beneficial impact due to education No impairment of Preserve resources
Visitor Use and Experience	Minor, adverse and long-term impact	Minor to moderate beneficial impact	or values Same as alternative 2
	No cumulative impact	Minor to moderate beneficial cumulative impact	
Socioeconomic Environment	No impact No cumulative impact.	Minor to moderate beneficial impact No cumulative impact	Same as alternative 2
Transportation	No impact No cumulative impact	Negligible impact on transportation No cumulative impact	Minor to moderate adverse impact Cumulative adverse impacts

AFFECTED ENVIRONMENT

INTRODUCTION

This section describes the characteristics of the existing environmental components identified as impact topics that could be affected by the alternatives. This provides information for analyzing impacts in the "Environmental Consequences" section, which assesses the effects the alternatives may have on the impact topics within the affected environment. The description of the affected environment focuses on only those environmental components potentially subject to effects from implementing either of the alternatives.

The Big Cypress *General Management Plan and Environmental Impact Statement* (NPS 1991) included a comprehensive description of the natural and cultural resources of the Preserve. This EA tiers to that document, in conformance with the CEQ (1978) guidelines for implementing the National Environmental Policy Act. Therefore, the "Affected Environment" section of the general management plan is incorporated by reference to define most of the affected environment for this document.

NATURAL RESOURCES

Water Quality

The original boundary of the Preserve was established at the perimeter of a predominantly self-contained, rain-driven watershed that lies upgradient of Everglades National Park. Major cypress strands were logged in the early 1900s, and areas of the watershed were used as farmland in the decades prior to the Preserve's establishment. However, the area's remoteness limited it to only sparse development, much of which has been reclaimed since the Preserve's establishment in 1974.

The waters of Big Cypress National Preserve are currently designated as Outstanding Florida Waters. This is a state designation, delegated by the U.S. Environmental Protection Agency (EPA) under the Clean Water Act, and is intended to protect existing high-quality waters.

The low-nutrient, high-quality water in the Preserve is vulnerable to degradation from contaminants. Because the water is of such high quality, even small amounts of contaminants could result in relatively large adverse effects. Potential external sources of nonpoint source pollution primarily include nutrient-enriched runoff from upstream agricultural activities, especially along the northern boundary of the Preserve. Potential internal contaminant sources include leakage and ancillary activities associated with oil and gas exploration and development, operation of vehicles along roads in the Preserve, oil and fuel leakage and soil disturbance caused by the operation of offroad vehicles in the Preserve.

Big Cypress National Preserve established a long-term water monitoring program for measuring surface water stage and quality in 1988. Water quality samples currently are collected every other month at ten stations located throughout the Preserve. The objective of this water monitoring program is to provide a long-term record for assessing ambient water quality conditions and contamination threats. Turbidity is among the

parameters tested. The Park Service is currently analyzing water quality data and will use the results in making management decisions.

An extensive, shallow, surficial aquifer underlies the Preserve. It lies in a porous limestone formation that is primarily 50-100 feet thick on the Preserve's western boundary and generally diminishes in thickness to the east. This aquifer is the main source of fresh water in Collier County.

Floodplains

The southwestern corner of the Preserve, including Ochopee, was mapped for floodplains by the Federal Emergency Management Agency (FEMA). According to FEMA, the headquarters and residential area at Ochopee are within the 100-year floodplain. Flooding at Ochopee as a result of a 100-year storm or hurricane storm surge could flood the area to a depth of 8 feet above mean sea level. There are no areas within the Preserve in the coastal high hazard area, and no areas are subject to flash flooding (NPS 1991).

Some occupation of the resources in Big Cypress is unavoidable if visitor use and recreation are to be provided (NPS 1991). Because the Ochopee area, including the Preserve headquarters, is within the 100-year floodplain, the NPS will continue to maintain an emergency evacuation plan to protect lives and limit property damage. The design of new structures would conform to requirements minimizing storm damage contained in the National Flood Insurance Program's "Floodplain Management Criteria for Flood-Prone Areas."

Providing recreational roads, parking areas, and associated facilities — including toilets, dumpster pads, and other proposed amenities — within floodplains is an exempt action under NPS guidelines for compliance with Executive Order (EO) 11988 so long as flood-proofing in design and construction is considered. In addition, natural resource management would emphasize the perpetuation of the value of floodplains. Moreover, the floodplains would be used for their educational, recreational, and scientific qualities through expanded interpretive programs and research emphasis. Therefore, the Park Service finds the proposed alternatives to be acceptable under Executive Orders 11988 and 11990 (NPS 1991).

Wetlands

The Preferred Alternative map illustrates the sawgrass wetland fringe surrounding the canal at the Preferred Alternative site location. The Alternate Site Location map illustrates the location of an approximately 0.5-acre willow wetland, small emergent wetlands along the borrow pit, small cypress/red maple wetlands located just south of U.S. 41, and a sawgrass wetland fringe area south of the proposed location of the welcome center.

Vegetation

The Big Cypress National Preserve *General Management Plan and Environmental Impact Statement* (NPS 1991) includes a comprehensive description of the vegetation resources. Since then, vegetation has been reclassified by Welch and Madden (1998) to provide consistency with the mapping of other public lands in the South Florida region. Sites for

Alternatives 2 and 3 are on previously disturbed land in the Stairsteps Unit, which was formerly classified as marsh and is now defined as a freshwater marl prairie.

The predominant natural vegetation type in the project area is bahia grass and associated low weeds with some sabal palms and desert fan palms. Palm trees can be seen from the sites. Vegetation on the sites of the proposed center is a sparse mix of native and exotic species. The sites are mowed regularly by the NPS to prevent the spread of exotic plant species. The surrounding habitat consists primarily of cordgrass, spikerush, saltgrass, cattails, sawgrass, purslane, and needlerush.

Wildlife

The location of the preferred alternative is on a filled freshwater prairie. Prairies support a diverse biotic community that includes a variety of birds, mammals, reptiles, amphibians and insects. Disturbance of the prairie from past development has affected habitat components of soil, vegetation, and surface water flow. Duever, et. al. (1986) provided a partial list of birds, reptiles, amphibians and mammals that use the habitats of the Preserve. A list of fish and vertebrates is now being compiled. The 1991 Big Cypress GMP contains a more detailed description of wildlife. A field visit to the locations of the proposed welcome center was conducted on May 13, 2003, and a summary of species identified is presented as appendix B.

Special Status Species

A field visit to the locations of the proposed welcome center was conducted on May 13, 2003, and a summary of species identified is presented as appendix B.

The West Indian manatee, a federally listed species, has been observed in the canal at the preferred alternative site. Wood storks, also a federally listed species, may use the canal in the location of the preferred alternative for feeding. The alternative 3 site does not contain suitable habitat for either the manatee or the wood stork.

Wood Stork (Mycteria americana)

Endangered wood storks forage annually in the Preserve when lower water levels provide concentrations of fish. Documented nesting in the Preserve was rare until 1996 when 45 colonies were reported (Jansen and Brooks 1996). The previous two consecutive years of high water and subsequent buildup of the prey base apparently provided ideal conditions in which to raise young. Wood stork nests have been found only sporadically in the Preserve since 1996. The storks feed on fish in shallow water and may use the canal in the site of the preferred alternative for feeding. The project sites are not within the 1,500-foot primary zone or the 2,500-foot secondary zone of a known nesting or roosting site (USFWS 1990).

West Indian Manatee (Trichechus manatus)

The West Indian manatee uses the open-water creeks and canals of the southwest portion of the Preserve. Manatees inhabit both salt and fresh water of sufficient depth (1.5 meters to usually less than 6 meters) throughout their range. They may be

encountered in canals, rivers, estuarine habitats, saltwater bays, and on occasion have been observed as much as 3.7 miles off the Florida Gulf coast. Between October and April, Florida manatees concentrate in areas of warmer water. When water temperatures drop below 21 to 22 degrees Celsius, they migrate to South Florida or form large aggregations in natural springs and industrial outfalls. Severe cold fronts have been known to kill manatees when the animals did not have access to warm water refuges. During warmer months they appear to choose areas based on food supply, water depth, and proximity to fresh water. Manatees may not need fresh water, but they are frequently observed drinking fresh water from hoses, sewage outfalls, and culverts.

The tidal waters south of U.S. 41 within the Preserve, including the canal adjacent to the alternative 2 site, have been designated by the USFWS as critical habitat for the West Indian manatee. The tidal canal, located adjacent to the alternative 2 site, terminates just south of U.S. 41 at the weir.

VISITOR USE AND EXPERIENCE

Visitation statistics maintained at the Oasis Visitor Center (table 3) report the total number of Preserve visitors from 1989 to 2002 as approximately 4.7 million. Visitation increased from 1989 to 2000 but decreased in 2001 and increased in 2002 (NPS 2003).

Table 3 - Visitation at Big Cypress National Preserve

Year	Visits
1989	81,157
1990	127,790
1991	159,172
1992	212,682
1993	234,830
1994	294,307
1995	365,463
1996	424,920
1997	462,553
1998	474,895
1999	503,110
2000	505,062
2001	409,771
2002	449,481
Total	4,705,193

The Florida Department of Transportation maintains a traffic count station along U.S. Highway 41 east of SR 29 inside the Preserve as well as Annual Average Daily Traffic (AADT) data. AADT is the total volume of traffic on a highway segment for one year, divided by the number of days in the year. Both directions of traffic volumes are reported as well as total two-way volumes. AADT volume from this station is shown in Table 4 for the years from 1991 to 2001 (Florida Department of Transportation 2003):

Table 4 - Historical AADT from Station 030104

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<u>Year</u>	Avg	<u>. Daily Volume</u>
19	91	3,998
19	92	3,600
19	93	3,600
19	94	2,400
19	95	3,100
19	96	2,800
19	97	3,300
19	98	2,700
19	99	4,300
20	00	3,200
20	01	3,400

The Big Cypress National Preserve visitor study conducted in the winter of 1999 by the Cooperative Park Studies Unit, University of Idaho (Meehan 1999), identified general visitor demographics. These findings are based on 857 questionnaires that were distributed January 2 through 10, 1999 at nine locations. Five hundred eighty-two surveys were returned for a 68% response rate.

Twenty-five percent of the total visitors surveyed were Florida residents. New York, Indiana, and California followed with 4% each. International visitors from 21 countries comprised 21 percent of the visitors surveyed. Germany, Canada, and England were the most frequently cited foreign countries of origin.

Birdwatching, viewing wildlife, sightseeing, experiencing wilderness, and experiencing solitude were rated as the most important activities by those surveyed. Hunting is also a popular recreational activity in the Preserve. Hunting seasons run from September through April.

The use of offroad vehicles (ORVs) is a popular recreational activity within Big Cypress National Preserve. This activity and associated impacts was studied in depth in the *Final Recreational Off-Road Vehicle Management Plan and Supplemental Environmental Impact Statement* (NPS 2000b). This plan closed the area around the proposed sites to off-road vehicular travel.

Hiking opportunities include Fire Prairie Trail and a section of the Florida National Scenic Trail. The Park Service collects limited information on visitor statistics for various categories of recreational use. Camping occurs in both frontcountry and backcountry sites. In 1999, there were 16,301 tent and recreational vehicle camping overnight stays. Backcountry camping statistics were collected only for hikers using Florida Trail campsites and totaled 10,158 overnight stays.

Visitors drive Turner River Road and Loop Road to view birds, alligators, and other wildlife in the roadside canals. People commonly fish in roadside canals, including the one on the site of the preferred alternative. Bicycling is gaining in popularity, particularly in the Bear Island area and along the Loop Road and Turner River Road/Birdon Road corridor. Canoeing occurs primarily on Turner River and Halfway Creek, with commercial tours taking frequent trips from U.S. Highway 41 to the Everglades City area. Hiking use on the Florida National Scenic Trail is increasing. Many hikers use the first 10 miles of the trail north of Oasis and then turn around, rather than hiking all the way through to I-75 or points farther north.

Formal and informal interpretation is available to visitors at the current Big Cypress Visitor Center at Oasis and at Concho Billie, Bear Island, and Turner River areas. Guided bicycle trips, canoe tours, and environmental education activities, as well as swamp walks and hikes on the Florida Trail, are offered each winter season from mid-December through early April.

Visitor facilities available include one visitor center, two picnic areas, one developed campground, five primitive campgrounds, and an interpretive trail on Loop Road. Planned projects include the welcome center this document is analyzing in addition to interpretive trails, a canoe landing, and improved parking/ORV staging areas.

SOCIOECONOMIC ENVIRONMENT

The economy of southern Florida around the Preserve is largely based on tourism and commercial fishing. Local businesses include commercial airboat tours, swamp buggy tours and animal exhibits. Everglades City has a growing tourism-based economy. Naples, Florida is the nearest metropolitan area.

The total number of visitors to Collier County in 2000 and 2001 was estimated to be approximately 1.3 million. The revenue generated from these tourists was approximately \$860 million per year for these two years (Research Data Services 2003).

TRANSPORTATION

Transportation is an important consideration because either alternative 2 or alternative 3 could affect vehicular traffic patterns. For the Preferred Alternative, site access would be from the existing Sea Grape Drive, but for alternative 3, a new driveway connection to U.S. 41 would be constructed east of the existing headquarters building. This alternate location, using a new driveway, would share access with headquarters and Preserve maintenance traffic thereby potentially creating security and control problems for the headquarters and maintenance areas. In addition, the alternative 3 site is not readily visible from U.S. 41, and therefore, easy access for eastbound traffic is restricted and will require additional advance signage to properly identify the access driveway to the site.

ENVIRONMENTAL CONSEQUENCES

METHODOLOGY FOR IMPACT ANALYSIS

The NPS based the analysis of impacts on the review of existing literature and Preserve studies; information provided by staff within the NPS, consultation with the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida and with other federal, state, and local entities.

The following definitions have been used to describe the impacts associated with the alternatives. Definitions relating to intensity of impact are described for natural resources, visitor use, socioeconomic environment and transportation.

Context is the setting within which an impact is analyzed, such as society as a whole, the affected region, the affected interests, and/or a locality. In this assessment the intensity of impacts is evaluated within a local (i.e. project area) context while intensity of the contribution of effects to cumulative impacts is evaluated in a regional context.

Duration is a measure of the time period over which the effects of an impact persist. The duration of an impact may be

short-term, meaning impacts would be less than two years in duration. Two years was selected as the difference between the short and long term due to the length of construction plus the length of revegetation and post treatment (1 year).

long-term, meaning impacts would be two years or more in duration

Type — impacts are considered to be either adverse or beneficial when analyzed under the National Environmental Policy Act.

Direct effects are caused by the action and occur at the same time and place.

Indirect effects are caused by the action, but occur later in time or are further removed in distance, but must be reasonably foreseeable.

DEFINITIONS FOR NATURAL RESOURCES ANALYSIS

The following definitions were used to evaluate the intensity, and cumulative nature of impacts on natural resources associated with the project alternatives.

Intensity is a measure of the severity of an impact.

The intensity of impact on water quality, floodplains, and wetlands may be

Negligible, meaning the impact is at the lower levels of detection or not measurable. Natural processes would not be affected.

Minor, meaning the impact is detectable and natural processes may be affected in a localized area.

Moderate, meaning the impact is clearly detectable and could have appreciable effect on natural processes.

Major, meaning the impact results in highly noticeable changes and would substantially alter natural processes.

The intensity of an impact for vegetation and wildlife may be

Negligible, meaning the impact is detectable, but would have no principal effect on biological resources.

Minor, meaning the impact is detectable but not expected to have an overall effect on natural community structure.

Moderate, meaning the impact is clearly detectable and could have an appreciable effect on individual species or natural processes.

Major, meaning the impact results in substantial and highly noticeable influences on individual species or natural processes.

Through coordination with the U.S. Fish and Wildlife Service, species of special concern were identified that were generally located in the region. This included information on each species, including their preferred habitat prey, and foraging areas. Preserve staff then collected more specific information such as the absence or presence of each species within the Preserve boundaries and the specific locations being considered. For special status species the following impact intensities were used. These terms are used to comply with Section 7 of the Endangered Species Act.

No effect — The alternative would have no effect on the special status species, including listed species.

Not likely to adversely affect — The alternative would be expected to have an insignificant, discountable, or beneficial effect on the special status species, including listed species.

Likely to adversely affect — The alternative would be expected to directly or indirectly have an adverse effect on the special status species, including listed species. Actions that could be likely to adversely affect species would include direct or indirect mortality of individuals; the removal or damage of nesting, breeding, foraging, or roosting habitats; impacts on food sources; and disturbance of nests during the breeding season. For wildlife, removal of vegetation could adversely affect species if it increased their susceptibility to predation.

DEFINITIONS FOR ANALYSIS OF VISITOR USE

The following definitions were used to evaluate the intensity, and cumulative nature of impacts on visitor use associated with the project alternatives.

Intensity is a measure of the severity of an impact.

The following levels were used to assess the impacts of the alternatives on visitor use.

Negligible — a negligible effect would be a change that would not be perceptible or would be barely perceptible by most visitors.

Minor — a slight change in a few visitors' experiences, which would be noticeable but which would result in little detraction or improvement in the quality of the experience.

Moderate — a moderate effect would be a change in a large number of visitors' experiences that would result in a noticeable decrease or improvement in the quality of the experience. This would be indicated by a change in frustration level or inconvenience for a period of time.

Major - a substantial improvement in many visitors' experience or a severe drop in the quality of many peoples' experience, such as the addition or elimination of a recreational opportunity or a permanent change in access to a popular area.

DEFINITIONS FOR ANALYSIS OF TRANSPORTATION

The following definitions were used to evaluate the intensity, and cumulative nature of impacts on transportation associated with the project alternatives.

Intensity is a measure of the severity of an impact.

The intensity of impact on transportation may be:

Negligible, meaning the impact could change Preserve traffic patterns, but the change would be so small that it would not be of any measurable or perceptible consequence.

Minor, meaning the impact could change traffic patterns, but the change would be slight and localized, with few measurable consequences.

Moderate, meaning the impact would result in readily apparent changes to traffic patterns with measurable consequences.

Major, meaning the impact would result in severely adverse changes in traffic patterns.

DEFINITIONS FOR ANALYSIS OF SOCIOECONOMIC ENVIRONMENT

The NPS based the impact analysis on socioeconomic environment on the review of existing literature and Preserve studies; information provided by staff within the NPS, consultation with the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida and with other federal, state, and local entities. The following definitions were used to evaluate the intensity and cumulative nature of impacts on socioeconomic environment associated with the project alternatives.

Intensity is a measure of the severity of an impact.

The intensity of impact on socioeconomic environment may be

Negligible, meaning the impact is at the lower levels of detection or not measurable.

Minor, meaning the impact is localized and slight but detectable.

Moderate, meaning the impact is clearly detectable and appreciable.

Major, meaning the impact is highly noticeable.

CUMULATIVE IMPACTS

Cumulative Impacts are described in regulations developed by the Council on Environmental Quality (CEQ), 40 CFR 1508.7. A cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of who undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Cumulative impacts were determined by combining the impact of the project alternatives with potential impacts of other past, present and reasonably foreseeable future actions. Therefore it was necessary to identify, other ongoing or foreseeable future projects and activities within the surrounding region. The following projects and activities identified include

- The wastewater collection and treatment system for the Preserve headquarters. This project involved the installation of a wastewater collection system and eliminated several old septic tanks not meeting current state standards. This project resulted in long-term, minor to moderate, beneficial impacts to water quality.
- The Florida Department of Transportation (FDOT) roadway improvements under the Florida Scenic Highway Program. FDOT is funding and managing a corridor Master Plan, currently under development, which will include a coordinated signage plan as well as a comprehensive interpretive plan. The designated Scenic Highways Program promotes a heightened awareness of Florida's exceptional resources and

unique history through educational and visual experiences. Scenic highway designations provide the following benefits: resource protection, community recognition, economic development/tourism, community vision designation, and partnering. The recent (2000) designation of Tamiami Trail as a National Scenic Byway is anticipated to contribute increased traffic levels on this road.

- The NPS is currently constructing 10 visitor safety highway improvements along Tamiami Trail and Loop Road in the Preserve. These improvements are anticipated to result in long-term, moderate to major benefits to visitor use by providing safe locations to leave the highway and providing visitors information about the Preserve and its resources. The construction will result in long-term impacts to vegetation and wetlands; however, the impacts are anticipated to be minor to moderate, since they were located to maximize the use of previously disturbed lands.
- The relocation of the Preserve's repair shop from the Oasis district to the Ochopee district, a distance of 20 miles, is tentatively planned for FY 2009. It will relocate the first-line supervisors' offices and maintenance training/breakroom to a more operationally efficient location at Ochopee. It will also provide a needed dry storage area and will include the paving of the maintenance area road/parking lot and the installation of a security fence.
- The replacement facilities would include a 2,830 square foot repair shop, a 2,580 square foot dry storage building, and a 3,200 square foot administrative space (foreman offices, restrooms, kitchen, and training/breakroom). This space would be designed all under one roof. A maintenance area site plan and a preliminary design plan for this building have been reviewed by Preserve management and the NPS Southeast Regional office. The sites being considered are located in the immediate vicinity of Preserve headquarters and will utilize the previously disturbed lands in this area. The adverse impacts of this project are anticipated to be negligible to minor and long term.
- Over the next 50 years there are a number of major water management projects which are anticipated to have major consequences on the hydrology and water quality of the Greater Everglades Ecosystem, including the Preserve. Most of these projects fall under the auspices of either the Comprehensive Everglades Restoration Plan (CERP) or the Everglades Forever Act (EFA), but other ecosystem restoration and water management initiatives are being pursued such as the Everglades Restoration Critical Projects. Implementation of CERP is expected to either partially or fully modify the system of levees and canals along the eastern extent of the Preserve, including the L29, L28, L28 Tieback, and L28 Interceptor, in the next 20 years. The purpose of these projects is to restore the surface water flow regime between the eastern Big Cypress Swamp and the Everglades. A CERP-sponsored study is also under way to evaluate ecosystem restoration options in southwest Florida that may result in similar actions in the western half of the Preserve. Implementation of the EFA is expected to reduce water pollution upstream within the Everglades Agricultural Area. These are waters that do not enter the Preserve under current conditions, but may do so in the future as CERP and other projects are completed. The Seminole Tribe Big Cypress Reservation Water Conservation Plan,

currently underway, will result in major changes to water volume, distribution, and quality within the reservation, which will affect downstream areas in the Preserve. Water management practices from citrus expansion north of the Preserve may influence hydrology and water quality in the Preserve as well.

- An Everglades Ecosystem Restoration Critical Project to construct 87 additional culverts under Tamiami Trail is also underway. In conjunction with the added culverts, a total of 29 blocking plugs would be constructed in the existing highway borrow canal. Blocking the east-west flow of the borrow canal will balance runoff conveyed by the proposed culverts. he success of this project will rely on the location of the culverts, placed to provide maximum benefits for hydrology as well as achieving the habitat modifications intended. This project will improve the natural sheet flow of surface water within the watersheds of Ten Thousand Islands National Wildlife Refuge & Aquatic Preserve, Southern Golden Gate Estates, Fakahatchee Strand Preserve State Park, Big Cypress National Preserve, and Everglades National Park. By creating greater flow beneath the Tamiami Trail, a more natural hydropattern will be established on either side of the highway. The objective of this project is to improve natural hydrology which will improve biological restoration for this region.
- A Recreational Off-Road Vehicle (ORV) Management Plan was completed by the NPS (2000) for the Preserve. It prescribes designating ORV trails and establishing parking/staging areas for ORV users. Implementation of this plan will concentrate ORVs onto the designated trails. This will result in beneficial impacts by reducing the estimated 22,000 miles of ORV trails to 400 miles, thus reducing the widespread impacts now associated with dispersed ORV use. This project is anticipated to have long-term, moderate to major benefits to wetlands, vegetation, wildlife, and special status species.

IMPAIRMENT OF PARK RESOURCES OR VALUES

In addition to determining the environmental consequences of the preferred and other alternatives, NPS *Management Policies* (NPS 2001) and Director's Order- 12, *Conservation Planning, Environmental Impact Analysis, and Decision-Making* (NPS 1982), require analysis of potential effects to determine if actions would impair park resources.

The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid or minimize to the greatest degree practicable adverse impacts on park resources and values. However, the laws do give the NPS management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the Park Service must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park

resources or values, including opportunities that otherwise would be present for the enjoyment of those resources or values. An impact to any park resource or value may constitute impairment. However, an impact would more likely constitute impairment to the extent it affects a resource or value whose conservation is

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. A determination of impairment is made within each conclusion statement for the impact topic under natural resources.

REGULATIONS AND POLICIES

Numerous laws and associated regulations, memoranda of agreement, and NPS policies provide direction for the design of project alternatives, the analysis of impacts and formulation of mitigation measures. These include, but are not limited to, the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), the Clean Water Act (CWA), and the Clean Air Act (CAA).

IMPACTS OF ALTERNATIVE 1 - NO ACTION (CONTINUE CURRENT MANAGEMENT)

Natural Resources

Water Quality. Existing conditions would continue. Sedimentation of the canal, if any, may continue as a result of erosion from the disturbed and sparsely vegetated site. This adverse impact would be negligible.

Cumulative Impacts. This alternative would result in no construction activities and would result in no cumulative impacts.

Conclusion. This alternative would not create any disturbance to the land or water and, therefore, would result in no impact or impairment to water quality. There would be no impairment of the resources or values of Big Cypress National Preserve.

Floodplains. Under this alternative no construction activities would occur, therefore there would be no impacts to floodplains.

Cumulative Impacts. Since this project would have no incremental impact on floodplains, this alternative would result in no cumulative impacts.

Conclusion. The implementation of this alternative would result in no direct and indirect adverse impacts to floodplains. The project would not contribute to the cumulative adverse impacts on floodplains. There would be no impairment of the resources or values of Big Cypress National Preserve.

Wetlands. Under this alternative no construction activities would occur, therefore there would be no impacts to wetlands.

Cumulative Impacts. Since this project would have no incremental impact on wetlands, this alternative would result in no cumulative impacts.

Conclusion. The implementation of this alternative would result in no direct and indirect adverse impacts to wetlands. The project would not contribute to the cumulative adverse impacts on wetlands. There would be no impairment of the resources or values of Big Cypress National Preserve.

Vegetation. Under this alternative no construction activities would occur, therefore no new impacts to vegetation would occur.

Cumulative Impacts. Since this project would have no incremental impact on vegetation, this alternative would result in no cumulative impacts.

Conclusion. The implementation of this alternative would result in no direct and indirect adverse impacts to vegetation. The project would not contribute to the cumulative adverse impacts on vegetation. There would be no impairment of the resources or values of Big Cypress National Preserve.

Wildlife. Under this alternative no construction activities would occur. Any wildlife currently using the site would continue using it in the same manner under this alternative.

Cumulative Effects. Since this project would have no incremental impact on wildlife, this alternative would result in no cumulative impacts.

Conclusion. Anticipated impacts as a result of this alternative would have a negligible effect on wildlife or wildlife habitat. There would be no impairment of wildlife resources.

Special Status Species. Under this alternative no construction activities would occur, therefore there would be no effect on either the wood stork or manatee.

Cumulative Impacts. Since this project would have no incremental impact on special status species, this alternative would result in no cumulative impacts.

Conclusion. This alternative would not impact the West Indian manatee and the wood stork, since there would be no construction. This alternative would not contribute to the long-term moderate cumulative effects on the manatee and wood stork. There would be no impairment of the resources or values of Big Cypress National Preserve.

Visitor Use

Under this alternative the welcome center would not be constructed, therefore the visitor use would not be affected by potential improvements in access to information. Visitation to the site would not change from the current level. Current visitors who fish or view wildlife in the canal would continue to use the site. There would be continuation of a minor, adverse and long-term impact to visitation under this alternative, as visitors to the southwest side of the Preserve would not have the opportunity to obtain information about the Preserve or other federal lands in south Florida.

Cumulative Impacts. Since this project would have no incremental impact on visitor use, this alternative would result in no cumulative impacts. This alternative would not contribute to any change in visitation numbers or use of the area and, therefore, would not contribute to cumulative effects on visitor use.

Conclusion. The implementation of this alternative would result in no effect on visitor use. This alternative would not contribute to the cumulative impacts on overall visitor use of the Preserve. However, there would continue to be an adverse, minor and long-term impact to visitors on the west side of the Preserve who do not have the opportunity to receive resource or travel information. The current number and type of visitors to the sites would not change.

Socioeconomic Environment

Economics. Under this alternative the welcome center would not be constructed. This alternative would result in no effect on the economics of the area.

Cumulative Impacts. Since this project would have no incremental impact on economics, this alternative would result in no cumulative impacts.

Conclusion. This alternative would have no effect on the economics of the area nor would contribute to the cumulative impacts.

Transportation

Under this alternative the welcome center would not be constructed. This alternative would result in no effect on transportation in the area.

Cumulative Impacts. Since this project would have no incremental impact on transportation use, this alternative would result in no cumulative impacts.

Conclusion. The implementation of this alternative would result in no effect on transportation. This alternative would not contribute to the cumulative impacts on transportation in the Preserve. The current number and type of visitors to the sites would not change.

IMPACTS OF ALTERNATIVE 2 - PREFERRED ALTERNATIVE

Natural Resources

Water Quality. The water in the Preserve is typically of very high quality. Therefore, even small amounts of contaminants can result in adverse effects. It is possible that some sediment or pollutants could enter the water during construction. Erosion control Best Management Practices (BMPs) would be utilized and maintained throughout construction and until soils were stabilized with vegetation. The use of BMPs would minimize the potential for sediment and contaminants from the parking area being carried into the water. Sewage and storm water handling systems would be constructed in accordance with current state and federal environmental protection standards to prevent long-term impacts to water quality. Plantings of vegetation would stabilize and hold the soil to prevent sedimentation of waterways. Design features of the parking lot and other facilities would prevent runoff from directly entering the waterway. With these measures, this alternative would result in a short-term, negligible effect on water quality.

Cumulative Impacts. Implementation of the Comprehensive Everglades Restoration Plan and the Tamiami Trail Culvert Project are anticipated to make major long-term improvements to water quality in the region. The program establishes water treatment areas that mitigate impacts to water quality from agricultural and urban development. The construction of the Tamiami Trail highway improvements has the potential to impact water quality by increasing the areas of impervious surfaces within the Preserve. These areas are anticipated to accumulate oil and grease relating to vehicles. However the impacts of these areas will be minimized by the construction of stormwater management systems in accordance with state law at these locations.

The impacts of implementing alternative 2 combined with the other projects are anticipated to have long-term, moderate to major, beneficial cumulative impacts. Although alternative 2 would have a short-term, negligible, adverse impact, this increment is not anticipated to reduce the anticipated beneficial cumulative impacts.

Conclusion. With the proposed mitigation measures, this alternative is expected to result in short-term, negligible, adverse impacts to water quality. The implementation of this alternative would not impair the resources or values of Big Cypress National Preserve.

Floodplains. Although the entire Preserve is considered within the 100-year floodplain, all proposed development would occur on the existing elevated fill pad. This, coupled with the design of the structures would mitigate any hazard and risk associated with building in a floodplain. Development of a welcome center outside of a floodplain is not feasible in this area. Therefore, the implementation of this alternative is expected to result in negligible, long-term, adverse impacts to floodplains.

Cumulative Impacts. The NPS plans to restore some areas impacted by ORV trails as part of implementing the 2000 *ORV Management Plan*. This would be a beneficial impact

to floodplains. Current hydrologic restoration improvements are underway as culverts are being installed under the Tamiami Trail as an Everglades Restoration Critical Project. These are anticipated to result in long-term, major benefits to floodplains.

The implementation of alternative 2 coupled with these additional projects is anticipated to result in moderate, beneficial cumulative impacts to floodplains through the restoration of floodplain functions.

Conclusion. The implementation of this alternative would result in negligible impacts to floodplains. Therefore, it would not result in impairment of the resources or values of Big Cypress National Preserve.

Wetlands. The proposed location for the welcome center is a previously filled area, and the South Florida Water Management District and the Army Corps of Engineers have indicated that no wetlands exist within the proposed construction site.

A wetland fringe surrounds the canal at the location of the proposed welcome center (see the Preferred Alternative map). The alternative proposes the construction of a footbridge over this canal. However, the bridge would be designed to avoid these wetlands.

Therefore, this alternative would result in no impacts to wetlands.

Cumulative Impacts. Construction in wetlands is controlled by Florida state and federal laws. Wetlands receive benefits from extra protection on lands managed by the Park Service. The NPS plans to restore some areas impacted by ORV trails as part of implementing the 2000 ORV Management Plan. Current hydrologic restoration improvements are underway, as culverts are being installed under the Tamiami Trail as an Everglades Restoration Critical Project. This will result in restoration of the hydrology to vast areas of wetlands. These projects would result in long-term, major, beneficial impacts to wetlands.

The impacts of implementing this alternative coupled with the other projects are expected to have major, beneficial, cumulative impacts on wetlands.

Conclusion. Implementation of this alternative would result in no impacts to wetlands, since no wetlands are located with the proposed footprint of the welcome center, and the bridge over the existing canal would be designed to avoid wetlands. Therefore, it would not result in impairment of the resources or values of Big Cypress National Preserve.

Vegetation. Under this alternative, the construction of the welcome center is expected to result in long-term, negligible to minor, adverse, direct impacts to vegetation. The construction of the facility would result in the permanent loss of approximately four acres of mowed vegetation primarily ruderal grasses and weedy herbaceous species. Of the 39 species of plants observed on this alternative site, 7 were ruderal, weedy species occupying the majority of the surface area in a mowed (artificial) state. The remainder were either palms or other landscape trees, exotic invasive species such as Brazilian

pepper, Mexican lead tree, or, along the canal banks, a mix of freshwater and marine plants such as leather fern, red mangrove, green buttonwood, wax myrtle, and sawgrass (32 species). A listing of the species observed from a field visit is presented as appendix B.

Although there would be permanent loss of vegetation, this loss represents a small area of primarily grasses and other ruderal species found in the region and none of the original native plant communities. One tree found on the site, the West Indian mahogany, is state-listed as endangered. However, this is a readily available, commercial landscape species.

The welcome center would also result in indirect, negligible, adverse impacts to vegetation. The facility could serve as source for the introduction of exotic plant species. The area currently receives limited use by humans, and the construction of the facility would increase the amount of human use at this site. Humans are a common means of spreading nonindigenous plant species (U.S. Congress Office of Technology Assessment 1993). Therefore, the introduction of higher numbers of people at this location could cause the spread of exotic plant species. This indirect, adverse impact is expected to be negligible, and the impacts would be reduced by implementation of mitigating measures. Furthermore, the mowed areas not utilized by the new facilities would continue to be mowed and, if planted with native vegetation, maintained to control exotic invasive species.

The project would result in minor, long-term benefits to vegetation through the incorporation of native landscape plantings in the project area. There would also be indirect benefits relating to vegetation, since visitors would be educated about the native plants and the threats of exotic plants to the Preserve. These benefits are anticipated to be long term and negligible to minor.

Cumulative Impacts. Impacts to the region's vegetation are occurring on lands managed by the NPS, state of Florida, and private landowners. The construction of the Tamiami Trail and Loop Road visitor safety improvements is resulting in adverse impacts to vegetation through the long-term loss of vegetation. These impacts are minimized through the siting of the locations on mostly previously disturbed lands. However, native vegetation would be impacted by the construction of the improvements. The installation of the wastewater system resulted in negligible, short-term, adverse impacts to vegetation. Trenches were dug for the installation of lines, which disturbed vegetation. The majority of the disturbance was within the existing roadways, where the impacts were negligible. Implementation of the ORV Plan is anticipated to have major, long-term benefits to the vegetation of the Preserve by eliminating ORVs from sensitive resources, such as prairies and the restoration of numerous miles of trails.

These projects, coupled with the impacts associated with alternative 2, are expected to result in moderate to major, beneficial cumulative impacts on vegetation. The implementation of the 2000 *ORV Management Plan* is expected to have major, long-term benefits to the vegetation of the Preserve.

Conclusion. The implementation of this alternative would result in negligible, direct and indirect, adverse impacts to vegetation due to the previously disturbed nature of the site and relatively small area impacted compared to the lands with similar vegetation communities in the region. Anticipated impacts would not result in impairment of the resources or values of the Preserve.

Wildlife. The site of this alternative is in a disturbed state with little to no return of natural vegetative cover, so prairie habitat components such as brush and dense grass that may have been on the site originally are now missing. Little natural wildlife habitat exists, and no loss of habitat is anticipated as a result of the preferred alternative. Terrestrial animals and birds that are currently using the disturbed area may be displaced during construction and use of the welcome center grounds. However, large areas of natural prairie habitat are available in the surrounding area. After construction, some birds and smaller animals may become accustomed to the new developments and return to use the grounds.

Indirect effects would be beneficial and long-term, because of visitors learning about local wildlife in the welcome center. This education could result in indirect benefits to wildlife by discouraging visitors to feed or disturb wildlife in the Preserve.

This alternative is expected to have short-term and long-term, negligible, adverse impacts during construction. In the short term, the noise and activity at the site during construction would have impacts to wildlife using the site and surrounding area. In the long term, the use of the site would cause disturbance to wildlife that return to the site.

Cumulative Impacts. The construction of the visitor safety highway improvements, the installation of the wastewater treatment system, and the proposed relocation of the maintenance shop have resulted or could result in impacts to wildlife. These projects would displace wildlife, due to noise and human activity during construction. The highway improvement construction would result in the permanent loss of wildlife habitat. However, due to the small scale of these projects relative to the available wildlife habitat, the adverse impact to wildlife would be negligible.

The implementation of CERP projects is anticipated to result in long-term, major benefits to wildlife through the restoration of large areas of wildlife habitat. These projects are anticipated to have a major cumulative benefit to wildlife. The implementation of alternative 2 would contribute a negligible, short-term, adverse impact to the cumulative impacts to wildlife.

Conclusion. This alternative is expected to have short-term and long-term, negligible, adverse impacts during construction. In the short term, the noise and activity at the site during construction would have impacts to wildlife using the site and surrounding area. In the long term, the use of the site by visitors would cause disturbance to wildlife that return to the site following construction.

Special Status Species. Construction at this location would not result in impacts within the existing canals. Therefore, no direct impacts to West Indian manatees are expected. Indirect impacts on manatees could include visitors feeding or harassing manatees from

the proposed pedestrian bridge or canal bank. This would be minimized through educational efforts of Preserve staff and the use of signage. Therefore, it is expected that this alternative is not likely to adversely affect the manatee.

The wood stork forages in open, shallow water areas. Storks have been observed by Preserve staff along the canal found at this location. Wood storks can also be seen foraging in roadside drainage swales such as along Tamiami Trail. Increased activity in the area could result in the displacement of wood storks that feed in this portion of the canal. However, due to the large area of suitable habitat in the immediate vicinity of the proposed construction site, the project is not likely to adversely affect the wood stork.

Cumulative Impacts. The greatest source of adverse impacts on wildlife species of special concern in surrounding Big Cypress ecosystems is habitat disruption and destruction, as in other South Florida ecosystems. The utilization of the site for this construction would contribute only a negligible direct effect on biological systems in the region. Indirect effects would be beneficial and long term, because visitors learning about local special status species in the welcome center may be more likely to respect and protect them.

The recent (2000) Tamiami Trail National Scenic Byway designation has the potential to increase traffic that could put storks at higher risk of mortality through collisions with cars. However, Tamiami Trail has been the primary east-west route across this part of the Big Cypress since before the establishment of the Preserve in 1974 and was designated a Florida Scenic Highway in 1998. It has continued to be a heavily traveled roadway, as urban growth rates along both the Gulf and Atlantic coastal areas continue to accelerate. Therefore, this recent designation is anticipated to have a minor, adverse impact on wood storks. Furthermore, roadway improvements, including a coordinated signage plan as well as a comprehensive interpretive plan, under the Florida Scenic Highway Program and hydrologic improvements under the road as an Everglades Restoration Critical Project are anticipated to have only temporary adverse impacts to the natural systems in this region due to construction activities. However, the hydrologic improvements entail installation of additional culverts under the roadway to provide restored functions to the wetlands adjacent to and downstream of the roadway, constituting a positive effect on habitat for the manatee and wood stork. The impacts of these projects, coupled with the direct and indirect, negligible, adverse impacts of implementing this alternative, are expected to have a minor to moderate, beneficial cumulative impact on the manatee and wood stork.

Conclusion. Implementation of this alternative would not likely adversely affect the West Indian manatees and wood storks nor impair the resources or values of Big Cypress National Preserve. There would be an indirect, beneficial impact on special status species due to the educational resources available in the welcome center to visitors.

Visitor Use

Visitation at the site would increase dramatically, as this is the purpose of the welcome center. Visitors to the site would enjoy views of the prairie from walkways and covered observation decks and could view wildlife in and on the canal from the footbridge.

Visitors to the southwest side of the Preserve would have increased opportunities to view and learn about the natural resources of the Preserve and to obtain information on the area. Visitors who currently fish in the canal might move farther south to remove themselves from the welcome center and activity.

Scenic views into the area would be affected. The facility's design would incorporate features and colors that would blend in with the surroundings and not unduly detract from the natural scenery. There are other structures and development in the immediate area, so the impact on scenic view is expected to be minor. Visitors would be primarily enjoying views outward from the facilities, which would not be affected.

The quality of visitor experience would be improved for those stopping at the center. Public restrooms and trash containers would provide a needed service and reduce littering. Landscaping with native plantings would increase the aesthetic quality of the area. By providing important resource information and interpretation, visitor safety would increase, as visitors learn precautions to take around potentially dangerous wildlife (e.g., alligators and snakes).

The implementation of this alternative would result in long-term, moderate benefits to the visitors of the Preserve.

Cumulative Impacts. This alternative would cause an increase in the number of visitors to the site itself and could cause some visitors to stay in the area longer. It is not expected to cause a change in total visitor numbers or type of use in the region and, therefore, would contribute a negligible amount to cumulative effects on the region's visitation patterns or traffic level. It would add a beneficial effect to the cumulative effects on the visitor experience.

Conclusion. The implementation of this alternative would result in minor to moderate, long-term benefits to visitor use. This alternative is expected to result in minor to moderate cumulative benefits to Preserve visitors and minor, adverse, long-term impacts to scenic quality.

Socioeconomic Environment

Economics. This alternative could result in an increase of visitors' length of stay. This could create increased opportunities for nearby businesses to provide commercial visitor services (service stations, lodging, guided trips, etc.). The construction is anticipated to result in long-term, minor benefits to the economics of the area.

The welcome center is anticipated to cost \$1,924,000 to construct. During construction a portion of these dollars would benefit the local economy. The construction contractor would purchase fuel and building supplies and hire local labor during the project. This is anticipated to result in short-term, minor to moderate benefits to the economics of the region.

Cumulative Impacts. This alternative could contribute a beneficial and long-term change to the social or economic functions of the immediate area, but this change would be minor and highly localized. It is not anticipated to be large enough to contribute to cumulative economic effects in the region.

Conclusion. This alternative would have a minor, long-term, beneficial effect on current social or economic conditions. In addition the project would result in minor to moderate, short-term, beneficial impacts to the region's economy.

Transportation

This alternative would not increase traffic beyond the immediate area of the welcome center. The center is not anticipated to become a destination site for regional visitors, nor are travelers anticipated to select travel on Tamiami Trail just because of the new welcome center. To mitigate safety concerns, a right-turn lane would be constructed for visitors exiting Tamiami Trail to the center.

Cumulative Impacts. This project would have a negligible effect on transportation and would not result in cumulative impacts.

Conclusion. The implementation of this alternative would result in a negligible effect on transportation. This alternative would not contribute to the cumulative impacts on transportation in the Preserve.

IMPACTS OF ALTERNATIVE 3

Natural Resources

Water Quality. The water in the Preserve is typically of very high quality. Therefore, even small amounts of contaminants can result in adverse effects. It is possible that some sediment or pollutants could enter the water during construction. Erosion control Best Management Practices (BMPs) would be utilized and maintained throughout construction and until soils are stabilized with vegetation. The use of BMPs would minimize the potential for sediment and contaminants from the parking area being carried into the water. Sewage handling systems would be constructed in accordance with current state and federal environmental protection standards to prevent impacts to water quality. Plantings of vegetation would stabilize and hold the soil to prevent sedimentation of waterways. Design features of the parking lot and other facilities would prevent runoff from directly entering the waterway. With these measures, this alternative would result in short-term, negligible effects on water quality.

Cumulative Impacts. The implementation of the Comprehensive Everglades Restoration Plan and the Tamiami Trail Culvert Project are anticipated to make major, long-term improvements to water quality in the region. The program establishes water treatment areas that mitigate impacts to water quality from agricultural and urban development. The construction of the Tamiami Trail visitor safety improvements has the potential to impact water quality by increasing the areas of impervious surfaces within

the Preserve. These areas are anticipated to accumulate oil and grease relating to vehicles. However, the impacts of these areas would be minimized by the construction of stormwater management systems in accordance with state law at these locations.

The impacts of implementing alternative 3 combined with the other projects are anticipated to have long-term, moderate to major, beneficial cumulative impacts. Although alternative 3 would have a short-term, negligible, adverse impact, this increment is not anticipated to reduce the anticipated beneficial cumulative impacts.

Conclusion. With the proposed mitigation measures, this alternative is expected to result in short-term, negligible, adverse impacts to water quality. The implementation of this alternative would not impair the resources or values of Big Cypress National Preserve.

Floodplains. Although the entire Preserve is considered within the 100-year floodplain, all proposed development would occur on the existing elevated fill pad. This, coupled with the design of the structures, would mitigate any hazard and risk associated with building in a floodplain. Development of a welcome center outside a floodplain is not feasible in this area. Therefore, implementation of this alternative is expected to result in negligible, long-term, adverse impacts to floodplains.

Cumulative Impacts. The NPS plans to restore some areas impacted by ORV trails as part of implementing the 2000 *ORV Management Plan*. This would be a beneficial impact to floodplains. Hydrologic restoration improvements are planned through the installation of culverts and canal plugs along U.S. 41 as an Everglades Restoration Critical Project. These are anticipated to result in long-term, major benefits to floodplains.

The implementation of alternative 3 coupled with these additional projects is anticipated to result in moderate, beneficial cumulative impacts to floodplains through the restoration of floodplain functions resulting from ecosystem-wide restoration efforts.

Conclusion. The implementation of this alternative would result in negligible impacts to floodplains. Therefore, it would not result in impairment of the resources or values of Big Cypress National Preserve.

Wetlands. Under this alternative the construction of the welcome center would impact a 0.5-acre, impounded, emergent, freshwater wetland (see the Alternative 3 map). Upland area available for development at this site is further diminished by SFWMD requirements that wetland buffer area be provided at a minimum of 15 feet with a required average buffer distance of 25 feet. The implementation of this alternative would result in minor, long-term, adverse impacts to wetlands, due to the permanent loss of 0.5 acre of isolated wetlands.

Cumulative Impacts. Construction in wetlands is controlled by Florida state and federal laws. Wetlands receive benefits from extra protection on lands managed by the NPS. The NPS plans to restore some areas impacted by ORV trails as part of implementing the 2000 *ORV Management Plan*. Hydrologic restoration improvements

are planned through the installation of culverts and canal plugs along U.S. 41 as an Everglades Restoration Critical Project. This will result in restoration of the hydrology to vast areas of wetlands. These projects would result in long-term, major, beneficial impacts to wetlands.

The impacts of implementing this alternative coupled with the other projects are expected to have major cumulative beneficial impacts on wetlands. Although this alternative would have negligible adverse impacts due to the loss of 0.5 acre of wetlands, these impacts would not reduce the overall benefits of wetlands, due to the installation of culverts under the Tamiami Trail.

Conclusion. The implementation of this alternative would result in minor, adverse impacts to wetlands, since 0.5 acre of isolated wetlands is located within the proposed footprint of the welcome center. It would not result in impairment of the resources or values of Big Cypress National Preserve.

Vegetation. Under this alternative, the construction of the welcome center is expected to result in long-term, moderate, adverse, direct impacts to vegetation. Construction of the facility would potentially result in the permanent loss of approximately 0.5 acre of isolated, impounded freshwater wetland species and approximately 3.5 acres of mowed vegetation in previously filled/graded lands comprised primarily of ruderal grasses and weedy herbaceous species. Of the 27 species of plants observed on this alternative site, 3 were ruderal, weedy species occupying the majority of the surface area in a mowed (artificial) state. The remainder were either cabbage palms, exotic invasive species such as Brazilian pepper, or, in the isolated wetland and along the canal banks, freshwater wetland plants such as coastal plains willow, green buttonwood, leather fern, wax myrtle, and sawgrass (24 species). One plant found on the north edge of the impounded wetland, the prickly pear cactus, is state-listed as threatened. A listing of the species observed from a field visit is presented as Appendix B.

Although there would be permanent loss of vegetation, this loss represents a small area of primarily grasses and other ruderal species found in the region and little of the original native plant communities. However, the vegetation in the impounded wetland is more diverse and more intact as a natural plant community with distinct strata of canopy trees, understory shrubs, and ground covers that provide ecotones and other habitat features such as cover or forage. A clump of cactus found on the edge of the mowed site on the north side of the impounded wetland is state-listed as threatened. However, this is a readily available commercial landscape species that can probably be protected in place or relocated. Replacement with commercially available cactus would also be an available option if protection is not possible or relocation attempts fail.

The welcome center would also result in indirect, negligible, adverse impacts to vegetation. The facility could serve as a source for the introduction of exotic plant species. The area currently receives limited use by humans, and the construction of the facility would increase the amount of human use at this site. Humans are a common means of spreading nonindigenous plant species (U.S. Congress Office of Technology Assessment 1993). Therefore, the introduction of higher numbers of people at this location could cause the spread of exotic plant species. This indirect, adverse impact is

expected to be negligible, and the impacts would be reduced by implementing mitigating measures. Furthermore, the mowed areas not utilized by the new facilities would continue to be mowed and, if planted with native vegetation, maintained to control exotic invasive species.

Cumulative Impacts. Impacts to the region's vegetation are occurring on lands managed by the NPS, State of Florida and private landowners. In the past, present and foreseeable future, actions could include road construction or improvement, housing and business development, construction of utility lines (above and below ground), fences, development of visitor facilities such as campgrounds, picnic areas and private resorts. These actions cause adverse impacts resulting from loss of native vegetation such as the wet (freshwater marl) prairies surrounding the headquarters and the proposed welcome center area. In this alternative, vegetation disturbance would occur on the existing fill pad, and the total impacts caused by this alternative would result in no net increase in disturbed native vegetation. Therefore, this alternative would not contribute to cumulative environmental effects to native vegetation communities in the region. There could be some long-term benefits to native vegetation from plantings done in the proposal.

Conclusion. The implementation of this alternative would result in negligible, direct and indirect, adverse impacts to vegetation due to the previously disturbed nature of the site and relatively small area impacted compared to the lands with similar vegetation communities in the region. Since the existing vegetation on the proposed site is not native, no effect on intact, native vegetation communities is anticipated as a result of this alternative. Anticipated impacts would not result in impairment of native vegetation. Furthermore, the project would have minor contribution to the cumulative adverse impacts on vegetation. The implementation of the alternative would not impair the resources or values of Big Cypress National Preserve. There would be an indirect, beneficial impact on vegetation due to the educational resources available in the welcome center to visitors.

Wildlife. The site of this alternative is in a disturbed state with little to no return of natural vegetative cover, so prairie habitat components such as brush and dense grass that may have been on the site originally are now missing. Little natural wildlife habitat exists, and no loss of habitat is anticipated as a result of alternative 3. Terrestrial animals and birds that are currently using the disturbed area may be displaced during construction and use of the welcome center grounds. However, large areas of natural prairie habitat are available in the surrounding area. After construction, some birds and smaller animals may become accustomed to the new developments and return to use the grounds.

Indirect effects would be beneficial and long term, because of visitors learning about local wildlife in the welcome center. This education could result in indirect benefits to wildlife, through discouraging visitors to feed or disturb wildlife.

This alternative is expected to have short-term and long-term, negligible, adverse impacts during construction. In the short term, the noise and activity at the site during

construction would have impacts to wildlife using the site and surrounding area. In the long term, the use of the site by visitors would cause disturbance to wildlife that return to the site following construction.

Cumulative Impacts. The construction of the Tamiami Trail visitor highway safety improvements, the installation of the wastewater treatment system, and the proposed relocation of the maintenance shop have resulted in or could result in impacts to wildlife. These projects may displace wildlife, due to noise and human activity during construction. The visitor highway safety improvement construction would result in the permanent loss of wildlife habitat. However, due to the small scale of these projects relative to the available wildlife habitat, the adverse impact to wildlife would be negligible.

The implementation of CERP is anticipated in result in long-term, major benefits to wildlife, since this project is anticipated to result in the restoration of large areas of wildlife habitat. These projects are anticipated to have a major cumulative benefit to wildlife. The implementation of Alternative 3 would contribute a negligible, short-term, adverse impact to the cumulative impacts to wildlife.

Conclusion. This alternative is expected to have short-term and long-term, negligible, adverse impacts during construction. In the short term, the noise and activity at the site during construction would have impacts to wildlife using the site and surrounding area. In the long term, the use of the site would cause disturbance to wildlife that return to the site.

Special Status Species. Construction at this location would not impact canals, and the borrow pit near this site is not tidally connected to manatee habitat. Therefore, no direct or indirect impacts to West Indian manatees are expected. Wood storks have never been observed in the vicinity of this alternative.

The implementation of this alternative would have no effect on the West Indian manatee and would not likely adversely affect wood storks.

Cumulative Impacts. The greatest source of adverse impacts on wildlife species of special concern in surrounding Big Cypress ecosystems is habitat disruption and destruction, as in other South Florida ecosystems. The utilization of the site for this construction would contribute only a negligible, direct effect on biological systems in the region. Indirect effects would be beneficial and long-term, because visitors learning about local special status species in the welcome center may be more likely to respect and protect them.

The recent (2000) Tamiami Trail National Scenic Byway designation has the potential to increase traffic that could put storks at higher risk of mortality through collisions with cars. However, Tamiami Trail has been the primary east-west route across this part of the Big Cypress since before the establishment of the Preserve in 1974 and was designated a Florida Scenic Highway in 1998. It has continued to be a heavily traveled roadway as urban growth rates along both the Gulf and Atlantic coastal areas continue to accelerate. Therefore, this recent designation is anticipated to have a minor adverse

impact on wood storks. Furthermore, planned Tamiami Trail roadway improvements, including a coordinated signage plan as well as a comprehensive interpretive plan, under the Florida Scenic Highway Program and hydrologic improvements as an Everglades Restoration Critical Project are anticipated to have only temporary adverse impacts to the natural systems in this region due to construction activities. However, the hydrologic improvements entail installation of additional culverts under the roadway to provide restored functions to the wetlands adjacent to and downstream of the roadway, constituting a positive effect on habitat for the manatee and wood stork. The impacts of these projects, coupled with the direct and indirect, negligible, adverse impacts of implementing this alternative, are expected to have minor to moderate, beneficial cumulative impacts on the manatee and wood stork.

Conclusion. The implementation of this alternative would have no effect on the West Indian manatee and would not likely adversely affect wood storks. The implementation of this alternative would not impair the resources or values of Big Cypress National Preserve. There would be an indirect, beneficial impact on special status species due to the educational resources available in the welcome center to visitors.

Visitor Use

Visitation at the site would increase dramatically, as this is the purpose of the welcome center. Visitors to the site would enjoy views of the prairie from walkways and covered observation decks and could view wildlife. Visitors to the southwest side of the Preserve would have increased opportunities to view and learn about the natural resources of the Preserve and to obtain information on the area.

Scenic views into the area would be affected. The facility's design would incorporate features and colors that would blend in with the surroundings and not unduly detract from the natural scenery. There are other structures and development in the immediate area, so the impact on the scenic view is expected to be minor. Visitors would be primarily enjoying views outward from the facilities, which would not be affected.

Quality of visitor experience would be improved for those stopping at the center. Public restrooms and trash containers would provide a needed service and reduce littering. Landscaping with native plantings would increase the aesthetic quality of the area. By providing important resource information and interpretation, visitor safety would increase, as visitors learn precautions to take around potentially dangerous wildlife (e.g., alligators and snakes).

The implementation of this alternative would result in long-term, moderate benefits to the visitors of the Preserve.

Cumulative Impact. This alternative would cause an increase in the number of visitors to the site itself and may cause some visitors to stay in the area longer. It is not expected to cause a change in total visitor numbers or type of use in the region and, therefore, would contribute a negligible amount to cumulative effects on the region's visitation patterns or traffic level. It would add a beneficial effect to the cumulative effects on visitor experience.

Conclusion. The implementation of this alternative would result in minor to moderate, long-term benefits to visitor use. This alternative is expected to result in minor to moderate cumulative benefits to Preserve visitors and minor, adverse, long-term impacts to scenic quality.

Socioeconomic Environment

Economics. This alternative could result in an increase of visitors' length of stay. This might create increased opportunities for nearby businesses to provide commercial visitor services (service stations, lodging, guided trips, etc.). The construction is anticipated to result in long-term, minor benefits to the economics of the area.

The welcome center is anticipated to cost \$1,891,000 to construct. During construction a portion of these dollars would benefit the local economy. The construction contractor would purchase fuel and building supplies and hire local labor during the project. This is anticipated to result in short-term, minor to moderate benefits to the economics of the region.

Cumulative Effects. This alternative could contribute a beneficial and long-term change to the social or economic functions of the immediate area, but this change would be minor and highly localized. It is not anticipated to be large enough to contribute to cumulative economic effects in the region.

Conclusion. This alternative would have a minor, long-term, beneficial effect on current social or economic conditions. In addition the project would result in minor to moderate, short-term, beneficial impacts to the region's economy.

Transportation

Under this alternative the welcome center would be constructed east of the headquarters building. A new driveway servicing the headquarters, Preserve maintenance area and welcome center traffic would be constructed. This location would have shared access with headquarters and the Preserve maintenance traffic, thereby potentially creating security and control problems. There would be minor to moderate, adverse safety impacts associated with combining the egress and ingress of the visitor traffic with the headquarters and Preserve maintenance traffic.

Cumulative Impacts. Since this project would have incremental impact on transportation use, this alternative would result in moderate, adverse cumulative impacts.

Conclusion. The implementation of this alternative would result in minor to moderate, adverse safety impacts on transportation. This alternative would contribute adverse cumulative impacts on transportation in the Preserve.

CONSULTATION AND COORDINATION

Scoping letters were distributed to the following agencies: Biscayne National Park, Collier-Seminole State Park, Everglades National Park, Fakahatchee Strand Preserve State Park, Florida Panther National Wildlife Refuge, Florida State Clearinghouse, Picayune Strand State Forest, Rookery Bay National Estuarine Research Preserve, Southeast Archeological Center, South Florida Ecological Services Office of the U.S. Fish & Wildlife Service, State Historic Preservation Officer, U.S. Army Corps of Engineers Jacksonville District, U.S. Department of Transportation, Florida Department of Transportation, and the U.S. Environmental Protection Agency, South Florida Office. The NPS has also consulted with the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida.

The NPS has consulted with the Florida State Historic Preservation Officer (SHPO) by letter dated October 31, 2002, in accordance with 36 CFR Part 800. The SHPO has reviewed the Florida Master Site File and records and determined that there are no historic properties in the area, and therefore the proposed welcome center would have no effect on historic properties.

NPS has consulted with the U.S. Fish & Wildlife Service (USFWS) by letter dated December 19, 2002. The USFWS stated that the preferred site would be the best location for the welcome center. The NPS has determined the preferred alternative would not affect or would not likely adversely affect federally listed species and has sent a copy of this assessment to the USFWS with a request for written concurrence with that determination.

NPS has sent scoping letters to the Miccosukee Tribe of Indians of Florida and Seminole Tribe of Florida concerning the project. NPS staff met with representatives of the Miccosukee Tribe to discuss the project and visit the sites. The Miccosukee Tribe has no objections to the project and requested the opportunity to discuss exhibits when work begins on the design. Both tribes have been sent copies of the assessment for review and comment.

The environmental assessment will be placed on a 30-day public review. In addition, copies were sent to appropriate federal and state agencies and the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida.

LIST OF PERMITS

The following permits would be required for the proposed welcome center: Florida Department of Environmental Protection (FDEP) National Pollutant Discharge Elimination System (NPDES) and South Florida Water Management District (SFWMD) Environmental Resource Permit (ERP). The following permits may be required: FDEP potable water distribution permit, FDEP wastewater permit, and U.S. Army Corps of Engineers (ACE) permit.

PREPARERS

GEC Associates, Inc.

GEC Associates, Inc. is a design, management and construction services firm providing the design/build services for the welcome center. As the prime consultant for the welcome center to the NPS, GEC Associates is the prime consultant for the preparation of the EA.

Civil Works, Inc., Civil & Environmental Subconsultants

Mr. James Gran. P.E., Vice President of Civil Works, Inc., Miami, Florida, has more than 22 years of design and construction experience on both public and private projects in Florida. He has been involved with extensive environmental permitting and PD&E projects including working as the first District Environmental Permits Coordinator for the Florida Department of Transportation, District Six. Mr. Gran has also constructed roadways, bridges, highway lighting and traffic signal systems.

Mr. Jeffrey Greenfield, Ph.D., P.E., Project Engineer, has more than 20 years of experience in the fields of civil and environmental engineering. The environmental assessments that he has conducted have focused primarily on commercial and industrial facilities. Mr. Greenfield's environmental experience includes contamination assessments, remedial system design, stormwater, air and hazardous waste permitting, and risk assessment.

Consulting Engineering & Science, Inc.

Robert T. McMullen is a Senior Environmental Scientist with Consulting Engineering & Science, Inc. in Miami, Florida. Mr. McMullen has over 15 years of experience in wetlands, marine science, NEPA compliance and environmental permitting as a State of Florida Environmental Specialist, a teacher, and a private consultant primarily in South Florida, Louisiana, and the Bahamas.

PERSONS CONSULTED

Big Cypress National Preserve

Larry Belles, Chief, Fire and Aviation
Jim Burch, Botanist
Carol Clark, Acting Superintendent
Ron Clark, Chief, Resource Management
Damon Doumlele, Environmental Protection Specialist
Deb Jansen, Wildlife Biologist
Isobel Kalafarski, Acting Chief of Interpretation
J.D. Lee, Chief Ranger
Pedro Ramos, Administrative OfficerTerry Saunders, Facilities Manager

National Park Service, Denver Service Center

Kristie Franzmann, Landscape Architect Patrick Kenney, Natural Resource Specialist

ACRONYMS

AADT - Average Annual Daily Traffic

ACE - U.S. Army Corps of Engineers

BMP - Best Management Practice

CAA - Clean Air Act

CEQ - Council on Environmental Quality

CERCLA - Comprehensive Environmental Response Compensation and Liability Act

CERP - Comprehensive Everglades Restoration Plan

CFR - Code of Federal Regulations

DO - Director's Order

EA - Environmental Assessment

EFA - Everglades Forever Act

EO - Executive Order

EPA - Environmental Protection Agency

ERP - Environmental Resource Permit

FAC - Florida Administrative Code

FDEP - Florida Department of Environmental Protection

FDOT - Florida Department of Transportation

FEMA - Federal Emergency Management Agency

FWC - Fish and Wildlife Conservation Commission

GMP - General Management Plan

NAGPRA - Native American Graves Protection and Repatriation Act

NEPA - National Environmental Policy Act

NHPA - National Historic Preservation Act

NPDES NOI - National Pollutant Discharge Elimination System Notice of Intent

NPS - National Park Service

ORV - Off-Road Vehicle

RCRA - Resource Conservation and Recovery Act

SFWMD - South Florida Water Management District

SHPO - State Historic Preservation Officer

SOF - Statement of Findings

SWPPP - Storm Water Pollution Prevention Plan

USDA - U.S. Department of Agriculture

USFWS - U.S. Fish & Wildlife Service

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National Resource Conservation Service

2003 Letter from Anthony Polizos, District Conservationist, March 3, 2003. On file at the Preserve.

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U.S. Fish & Wildlife Service

- "Habitat Management Guidelines for the Bald Eagle in the Southeast Region", United States Fish and Wildlife Service., Atlanta, GA.
- "Habitat Management Guidelines for the Wood Stork in the Southeast Region", Southeast Region, Atlanta, Georgia. Prepared by John C. Ogden, Everglades National Park. Unites States Fish and Wildlife Services, Atlanta, GA.

APPENDIX A RESPONSES FROM VARIOUS AGENCIES



Miccosukee Tribe of

of Florida

Business Council Members
Billy Cypress, Chairman

Jasper Nelson, Ass't. Chairman Max Billie, Treasurer

Andrew Bert Sr., Secretary Jerry Cypress, Lawmaker

April 2, 2003

Superintendent John Donahue Big Cypress National Preserve HCR 61, Box 110 Ochopee, FL 34141

Dear Superintendent Donahue:

The Miccosukee Tribe received your letters concerning government-to-government consultations concerning the proposed construction of a multi-agency Welcome Facility on U.S. 41 in Big Cypress National Preserve. The Tribe welcomes government-to-government consultation and will be glad to participate in this project with Preserve Staff. The Tribal representatives will be Mr. Fred Dayhoff and Mr. Steve Terry.

Thank you for consulting with the Tribe. Please contact Mr. Steve Terry of my staff at (305) 223-8380, Ext. 2243, to arrange for the first meeting.

Sincerely,

Billy Cypress Tribal Chairman

Billy ly

PC: Steve Terry, Land Resources Manager



United States Department of the Interior

NATIONAL PARK SERVICE

SOUTHEAST ARCHEOLOGICAL CENTER

2035 E. Paul Dirac Drive Johnson Building, Suite 120 Tallahassee, Florida 32310

February 6, 2003

Dear Superintendent Donahue:

Enclosed, please find a copy of a trip report titled Trip Report on Examination of Two Proposed Visitor Center Locations and Examination of Historic Sites in Pinecrest, Big Cypress National Preserve, January 8, and January 26-28, 2003, SEAC Acc. 1827, by Ms. Schwadron, of my staff.

Sincerely,

John E. Ehrenhard,

Director, Southeast Archeological Center



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

SOUTHEAST ARCHEOLOGICAL CENTER
2035 E. Paul Dirac Drive
Johnson Building, Box 7
Tailahassee, Florida 32310

February 4, 2003

Memorandum

To:

Director John Ehrenhard, Southeast Archeological Center

From:

Archeologist, Margo Schwadron, Southeast Archeological Center

Subject:

Trip Report on Examination of Two Proposed Visitor Center Locations and Examination of Historic Sites in Pinecrest, Big Cypress National Preserve,

January 8, and January 26-28, 2003, SEAC Acc. 1827.

INTRODUCTION

On December 19, 2002, the Southeast Archeological Center (SEAC) received a letter from Big Cypress National Preserve (BICY) stating that BICY was in the process of preparing an Environmental Assessment (EA) for construction of a multi-agency Visitor's Center on U.S. 41 (Tamiami Trail) in BICY. Two locations were proposed for the site of this new facility.

The two locations selected for the new facility are located on formerly disturbed and filled locations, and would probably require no archeological testing. Nevertheless, since I already had a project planned in Everglades National Park (EVER), I was able to stop off at the Preserve and examine the preferred new facility location. The area is located between U.S. 41 (Tamiami Trail) and Seagrape Drive, close to the existing Headquarters, on a previously filled, open area.

On January 8, 2003, I arrived at BICY at approximately 3:30 p.m. I proceeded to walkover the preferred new Visitor's Center location, taking digital photographs of the area (Figures 1 and 2). The area is currently open with sparse grass covering exposed limestone ruble fill. After examining the area it is obvious that the area is previously disturbed and filled, and that construction of the facility would not have any impacts to any archeological or historical resources. I concur with the Florida State Historic Preservation Officer's (FLSHPO) finding that no historic properties will be affected. Therefore, no archeological testing is required, and it is recommended that the area should be considered cleared for construction.

After returning to SEAC, I received a phone call from Ron Clark, Chief, Resource Management Division, asking if it would be possible for SEAC to examine the alternative location for the Visitor's Center. On January 28, I met Ron Clark at BICY headquarters, where we discussed the plans for the new visitor's facility, including the alternative location.

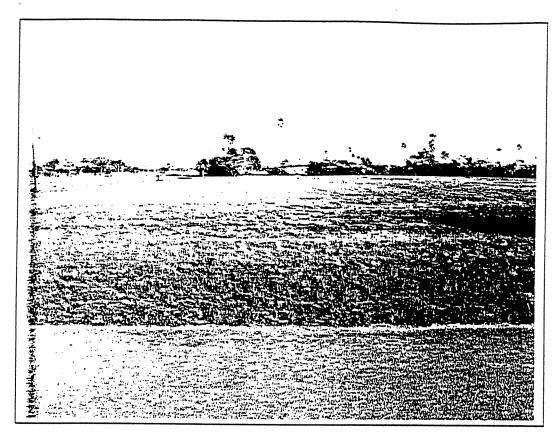


Figure 1. Preferred Visitor's Center location, looking east towards BICY Headquarters, taken from Seagrape Drive.

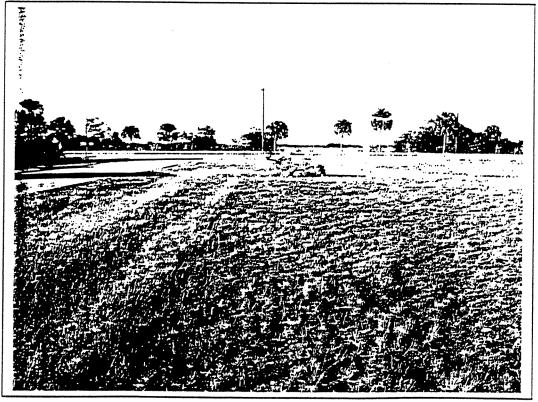


Figure 2. Preferred Visitor's Center location, view looking north at U.S. 41 (Tamiami Trail).

The proposed alternative Visitor's Center location is located directly in back of the existing BICY Headquarters parking lot (Figure 3). Like the preferred Visitor's Center location, this local is also a previously disturbed and filled area. Currently, the location is an open field with grass covering over the limestone rubble (see Figure 3). After walking over the area, it was determined that since the area is previously disturbed and filled, that if construction of the Visitor's Center was in this location, it would not have any impacts to any archeological or historical resources. Therefore, no archeological testing is required, and it is recommended that the area should be considered cleared for construction.

BICY plans to streamline compliance with the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) with the preparation of an Environmental Assessment (EA) for construction of the new Visitor's Facility. Federal agencies may use the NEPA process for compliance with section 106, if certain standards are met. Since both SEAC and the FLSHPO have determined that no archeological resources or historic properties are located in either of the proposed Visitor's Center locations, there will be no adverse effect, and there is no further requirement for identifying historic properties or assessing the effects of the undertaking in these locations. It is recommended that BICY continue with plans for construction of the Visitor's Center in either proposed location.



Figure 3. The alternative Visitor's Center location, looking west towards the back of the BICY Headquarters and parking lot. Note limestone rubble and fill.



Jeb Bush Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tailahassee, Fiorida 32399-3000

David B. Struhs
Secretary

January 31, 2003

Mr. John Donahue, Superintendent National Park Service Big Cypress National Preserve HCR 61, Box 110 Ochopee, Florida 34141-9710

Re: U.S. Department of the Interior, National Park Service, Notice of Preparation of Environmental Assessment (EA) for Construction of a Multi-Agency Welcome Facility on U.S. Route 41, Big Cypress National Preserve, Collier County

SAI: FL200212053131

Dear Mr. Donahue:

The Florida State Clearinghouse, pursuant to Executive Order 12372, Gubernatorial Executive Order 95-359, the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended, and the National Environmental Policy Act, 42 U.S.C. §§ 4321, 4331-4335, 4341-4347, as amended, has coordinated the review of the above-referenced Draft Environmental Assessment (EA) for the proposed project.

The Department of Environmental Protection indicates that a wastewater collection system permit will be required from the Department of Environmental Protection (DEP), if the building connects to the existing wastewater treatment plant. The wastewater permit will be processed by the DEP office in Ft. Myers. A potable water distribution system permit may also be required, depending on the exact method of connection. The applicant should check with the DEP office in Ft. Myers on required permits when detailed plans have been finalized. Please see the enclosed DEP memo for additional details.

The South Florida Water Management District (SFWMD) states that the project is consistent with its authorities, and indicates that a permit authorizing construction of surface water management systems and authorized wetland impacts was issued on June 13, 2002. The proposed welcome center was not included in the issued permit; consequently, a permit modification will be required. Please see enclosed SFWMD comments for additional detail.

The Southwest Florida Regional Planning Council (SFRPC) states that the project is regionally significant and consistent with the goals and policies of its Strategic Regional Policy Plan. Please see the enclosed comments from the SFRPC.

Mr. John Donahue January 31, 2003 Page 2

The Department of Transportation states that the project is consistent with its authorities, and that comments were being sent under separate cover. Please see enclosed DOT comments.

Based on the information contained in the Environmental Assessment, and the comments provided by our reviewing agencies, as summarized above and enclosed, the state has determined that, at this stage, the above-referenced project is consistent with the Florida Coastal Management Program (FCMP). All subsequent environmental documents prepared for this project must be reviewed to determine the project's continued consistency with the FCMP. The state's continued concurrence with the project will be based, in part, on the adequate resolution of issues identified during this and subsequent reviews.

Thank you for the opportunity to review this project. If you have any questions regarding this letter, please contact Mr. Bob Hall at 850/245-2163.

Sincerely.

Sally B. Mann, Director

Office of Intergovernmental Programs

SBM/rwh Enclosures

cc: Gordon Romeis, DEP, Ft. Myers
Jim Golden, SFWMD
David Y. Burr, SWFRPC
Sandra Whitmire, FDOT, Tallahassee

Florida Department of **Environmental Protection**

Memorandum

TO:

Florida State Clearinghouse

FROM:

Robert W. Hall, Environmental Specialist Office of Intergovernmental Programs

DATE:

January 31, 2003

PROJECT:

U.S. Department of the Interior, National Park Service, Notice of

Preparation of Environmental Assessment (EA) for Construction of a Multi-Agency Welcome Facility on U.S. Route 41, Big Cypress National Preserve, Collier County

SAI:

FL200212053131

The Department has reviewed the above-referenced project and offers the following comments.

The project will require an Environmental Resource Permit (ERP) from the South Florida Water Management District (SFWMD).

A wastewater collection system permit will be required from the Department of Environmental Protection (DEP) if the building connects to the existing wastewater treatment plant. The wastewater permit will be processed by the DEP office in Ft. Myers. A potable water distribution system permit may also be required, depending on the exact method of connection. The applicant should check with the DEP office in Ft. Myers on required permits when detailed plans have been finalized.

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Project: FL200212053131

Description:

U.S. Department of the Interior - National Park Service -Notice of Preparation of Environmental Assessment (EA) for Construction of a Multi-Agency Welcome Facility on U.S. Route 41 (Tamiami Trail) - Big Cypress National Preserve -

Collier County, Florida.

Keywords:

NPS - NOI Prep of EA for Welcome Facility - Big Cy

Program:

Review Comments

Page:

Reviewer:

SOUTH FLORIDA WMD

Date:

12/19/2002

Description:

Consistent/Comments. On June 13, 2002, the SFWMD issued ERP No. 11-02076-P which authorized construction of surface water management systems and authorized wetland impacts/mitigation associated with scenic corridor visitor safety improvements along U.S. 41 within the Big Cypress Basin National Preserve. The ERP covered 11 separate sites totalling 25.53 acres of land area. Although improvements at the existing Preserve headquarters were included within this

permit, the permitted improvements did not include

construction of a welcome center as shown in the submitted information. Therefore, the proposed facility will require a

modification to ERP No. 11-02076-P.

Comment

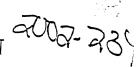
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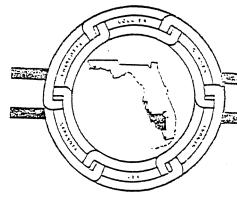
FLORIDA STATE CLEARINGHOUSE RPC INTERGOVERNMENTAL COORDINATION AND RESPONSE SHEET



SAI#: FL200212053131				
COMMENTS DUE TO CLEARING	HOUSE: 1/	4/03		DATE: 12/4/02
AREA OF PROPOSED ACTIVITY:	COUNTY: COL	LIER	CITY:	
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PROJECT DESCRIPTION U.S. Department of the Interior - National Construction of a Multi-Agency Weld County, Florida.	Maria I Port A			33
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				JAN n a anna

ALL CONCERNS OR COMMENTS REGARDING THE ATTACHED PROJECT (INCLUDING ANY RECEASE ATTACH THIS RESPONSE FORM AND REFER TO THE SAI # IN ALL CORRESPONDENCE.

IF YOU HAVE ANY OUESTIONS RECARDING TWO



Southwest Florida Regional Planning Council

4980 Bayline Drive, 4th Floor, N. Ft. Myers, FL 33917-3909 (941) 656-772

P.O. Box 3455, N. Ft. Myers, Fl. 33918-3455 SUNCOM 749-7720 FAN 944-656-7724

December 17, 2002

Mr. Damon Doumlele United States Department of the Interior National Park Service HCR 61, Box 110 Ochopee, FL 34141-9710

RE: IC&R Project #2002-234

State Clearinghouse #FL200212053131

U.S. Department of the Interior - National Park Service - Notice of Preparation of Environmental Assessment (EA) for Construction of a multi-agency welcome facility on U.S. Route 41 (Tamiami Trail) - Big Cypress National Preserve - Collier County, Florida.

Dear Mr. Doumlele:

The staff of the Southwest Florida Regional Planning Council reviews various proposals, Notifications of Intent, Preapplications, permit applications, and Environmental Impact Statements for compliance with regional goals, objectives, and policies, as determined by the Strategic Regional Policy Plan. The staff reviews such items in accordance with the Florida Intergovernmental Coordination and Review Process (Chapter 29I-5, F.A.C.), and adopted regional clearinghouse procedures.

These designations determine Council staff procedure in regards to the reviewed project. The four designations are:

Less Than Regionally Significant and Consistent no further review of the project can be expected from Council.

Less Than Regionally Significant and Inconsistent Council does not find the project of regional importance, but will note certain concerns as part of its continued monitoring for cumulative impact within the noted goal area.

Regionally Significant and Consistent project is of regional importance, and appears to be consistent with Regional goals, objectives, and policies.

To: Mr. Damon Doumlele
Date: December 17, 2002
Re: SWFRPC #2002-234

Page: 2

Regionally Significant and Inconsistent project is of regional importance and does not appear to be consistent with Regional goals, objectives, and policies. Council will oppose the project as submitted, but is willing to participate in any efforts to modify the project to mitigate the concerns.

The above referenced document has been reviewed by this office, based on the information contained in the document, and on local knowledge, has been found **Regionally Significant and Consistent** with adopted goals, objectives, and policies of the Strategic Regional Policy Plan.

Should you or any other party request this finding to be reconsidered, please contact Nichole L. Gwinnett, IC&R Coordinator, with this request, or any questions concerning staff review of this item. This recommendation will be discussed at the next scheduled Council meeting. Should Council action differ from the staff recommendation, you will be notified.

Sincerely,

SOUTHWEST FLORIDA REGIONAL PLANNING COUNCIL

David Y. Burr

Executive Director

DYB/NLG

cc: Cindy Cranick, Florida State Clearinghouse Coordinator

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Project: FL200212053131

Description:

U.S. Department of the Interior - National Park Service -Notice of Preparation of Environmental Assessment (EA) for Construction of a Multi-Agency Welcome Facility on U.S. Route 41 (Tamiami Trail) - Big Cypress National Preserve -

Collier County, Fiorida.

Keywords:

NPS - NOI Prep of EA for Welcome Facility - Big Cy

Program:

Review Comments

Page:

998 Page 7/11 9 9

Reviewer:

TRANSPORTATION

Date:

01/10/2003

Description:

Consistent with Comments being sent under separate cover.

LGS FDOT/D1

Comment

Type:

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COUNTY: COLLIER 12/4/02 DATE: COMMENTS DUE DATE: 1/4/03 CLEARANCE DUE DATE: Message: 2/2/03 SAI#: FL200212053131 STATE AGENCIES WATER MNGMNT, DISTRICTS OPB POLICY UNITS SOUTH FLORIDA WMD ENVIRONMENTAL POLICY UNIT AGRICULTURE 01-2223 (NFS 106) WBY Collier OTTED COMMUNITY AFFAIRS SAI - LISNPS-EA FISH and WILDLIFE COMMISSION X STATE TRANSPORTATION 7002 - 11502 **ENVIRONMENTAL PROTECTION** chane general plan 19-5180 (HPS-106) SBE concurs a/nature trail RECEIVED JAN 0 6 2003 OIP/OLGA The attached document requires a Coastal Zone Management Act/Florida Project Description: Coastal Management Program consistency evalutation and is categorized as one of the following: U.S. Department of the Interior - National Park Service - Notice of Preparation of Environmental Federal Assistance to State or Local Government (15 CFR 930, Subpart F). Assessment (EA) for Construction of a Multi-Agencies are required to evaluate the consistency of the activity. Agency Welcome Facility on U.S. Route 41 (Tamiami Trail) - Big Cypress National Preserve -Direct Federal Activity (15 CFR 930, Subpart C). Federal Agencies are X Collier County, Florida. required to furnish a consistency determination for the State's concurrence or objection.

- Outer Continental Shelf Exploration, Development or Production

 Activities (15 CFR 930, Subpart E). Operators are required to provide a consistency certification for state concurrence/objection.
- Federal Licensing or Permitting Activity (15 CFR 930, Subpart D). Such projects will only be evaluated for consistency when there is not an analogous state license or permit.

To:	Florida State Clearinghouse	EO. 12372/NEPA	Federal Consistency
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From:

Division/Eureau:

Division of Historical Resources Bureau of Historic Preservation TE DEC 10 PH IZ: ET.

Reviewer SAGAL JA VING Bulen & Mintel

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Division/Bureau:

Reviewer.



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Keywords:

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Reviewer:

FISH and WILDLIFE COMMISSION

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12/11/2002

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NC by Brian Barnett

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Reviewer:

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Carol Clark

To: Damon Doumlele/BICY/NPS@NPS, John J Donahue/BICY/NPS@NPS

CC:

01/13/2003 07:42 AM EST

Subject: EPA Site Visit

Carol A. Clark
Deputy Superintendent
Big Cypress National Preserve

--- Forwarded by Carol Clark/BICY/NPS on 01/13/03 07:41 AM ---



slawrence@usgs.gov

To: Carol_Clark@nps.gov

01/10/03 11:12 AM EST

Subject EPA Site Visit

CC:

Dear Carol,

It was nice meeting you and your staff yesterday during the site visit at Big Cypress National Preserve Headquarters. In reference to National Park Service request as stated in the Letter dated Dec. 19, 2002 for the construction of a multi-agency Welcome Facility, located at Ochopee, Fl on US 41. Two sites were inspected (the proposed site located on the west side of the Headquarters and the alternative site, located on the east side of the NPS Headquarters) in accordance to 404 Clean Water Act (b) (1) Guidelines, and were found to within compliance. Both sites are located within uplands and wetlands will not be disturbed or altered. The Environmental Protection Agency (EPA) appreciates the opportunity to comment and be a part of the scoping process for this project. If I can be of any further assistance please contact me at 941-939-9872.

Steve

Lawrence

EPA

Biologist



United States Department of the Interior

NATIONAL PARK SERVICE Everglades National Park

ENG:

Dry Tortugas National Park 40001 State Road 9336555 Homestead, Florida 33034-6733

REPLY REFER TO

1.76

JAN 2 7 2063

John J. Donahue, Superintendent Big Cypress National Preserve HCR of Box 110

Ochopee, Florida 34141-9710

Attn: Damon Doumlele

Dear Mr. Donahue:

This responds to your letter dated December 19, 2002 regarding construction of a multi-agency Welcome Facility on U.S. Route 41 in Big Cypress National Preserve.

Like the Preserve. Everglades National Park also has existing guidance to provide new and/or improved visitor facilities in this area, near the Preserve's southwestern boundary. The Everglades National Park's 1979 Master Plan called for an improved or expanded visitor contact area in nearby Everglades City. The 1989 Everglades National Park Expansion Act directed construction of a visitor center facility at Everglades City, to be called, "The Marjory Stoneman Douglas Center."

As you know, we are now starting a new General Management Plan, where among other things, a determination will be made regarding the appropriate levels and locations of development including those to enhance the quality of visitor enjoyment and experiences. The Gulf Coast area has been, and will likely remain among the fastest growing in terms of park visitation and use. As a result, the GMP will assess the adequacy of our Everglades City facility and identify the full range of options to meet Everglades National Park's anticipated needs over the next twenty years for the Gulf Coast area.

Recent park internal scoping sessions for the GMP have identified issues related for improved visitor information, services and facilities, and the possibility of establishing shared multi-agency venues. The upcoming public scoping process is likely to reveal similar ideas. Your proposal offers a good chance for us and other interested agencies to work together to assess each of our particular needs and to determine the efficiencies and logic of having multi-agency facilities where they make sense from ecological, visitor use, and operational perspectives. While you are still early in scoping for this project. I would be interested in meeting to learn more about the Preserve's plans and for Everglades and Big Cypress to explore future opportunities for shared facilities in more detail.

Please let me know a meeting time that would be convenient for you. Should there be any questions please contact Fred Herling at 305-242-7704.

Sincerely,

Maureen Finnerty Superintendent

Mann thurty

-



JEB BUSH GOVERNOR THOMAS F. BARRY, JR.

January 13, 2002 3

Ms. Cindy Cranick, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Boulevard, MS 47
Tallahassee, Florida 32399-3000

RE: ICAR REVIEW (SAI# FL200212053131C)

BIG CYPRESS PRESERVE WELCOME FACILITY (COLLIER COUNTY)

Dear Ms. Cranick

District One, Florida Department of Transportation, has reviewed the above-referenced Intergovernmental Coordination and Review (ICAR) document, and offers the following comments:

- The Applicant, the National Park Service, proposes to construct a Multi-Agency Welcome Facility within the Big Cypress National Preserve on the south side of Tamiami Trail (US 41) in south central Collier County. The four-acre site will include a 4,500-square-foot structure, and a hard-surfaced parking area for visitors designed to accommodate 28 passenger vehicles and 13 recreational vehicles. Access to US 41 will be via Seagrape Drive. A right-turn lane already exists on US 41 at Seagrape Drive. Overall attendance to the Preserve's facilities are hoped to reach 1.4 million visitors annually, according to the Applicant's documentation.
- Although an access permit was issued, via an addendum to Permit No. 01A1970017 (AM Log # 03-773) for this project in August of 2002, the Department has determined that the traffic/intersection analyses submitted with the original permit application did not include a Multi-Agency Welcome Facility at Seagrape and US 41. The earlier permit application by the Applicant stated that the "... estimated traffic volumes and turning movements at the four intersections do not meet the warrants of ITE or FDOT for the inclusion of a left turn lane on the through street (US 41)." For the safety of the motoring public, the proposed Welcome Facility's traffic generation and turning movements will need to be factored in to the earlier analyses in order to revisit the revised results of the analyses for the US 41/Seagrape Drive Intersection

Consequently, the Applicant will be required to revisit the earlier traffic analyses with updated information, and submit the results for review by the Department, to determine whether a left-turn lane or any other improvements will be needed to US 41 at Seagrape Drive. The Applicant is directed to contact Mitch Riley, Permits/Inspection Manager at (239) 659-5767, or may visit the Permits Office, at 2705 Horseshoe Drive South, Naples, Florida 34104.

Ms. Cindy Cranick, Florida State Clearinghouse January 13, 2002 Page 2

The Applicant will also need to coordinate the project closely with the Tamiami Trail Scenic Highway Corridor Management Entity (CME). The Department is funding and managing a corridor Master Plan, currently under development, which will include a coordinated signage plan as well as a comprehensive interpretive plan. The Applicant will need to contact the Project Coordinator/Community Liaison for this project at (239) 461-4300, in Fort Myers.

If District One, Florida Department of Transportation, may be of further service, or should you have any questions, please contact me at Suncom 741-4300 or (239) 461-4300.

Sincerely

District ICAR Coordinator

LGS/ls

Attachment

Sandra Whitmire
Ricky Langley
Mike Williams
Dick Combs
Ben Walker
Mike Tako
Rick MacCalla
Adam Rivera
Mike Rippe
Deborah Snyder
Bob Herrington

Mitch Riley
Ed Hutcheson
Mark Schulz
Marlon Bizerra
Johnny Limbaugh
Sarah Clarke
Tom Garcia
Marcelle Zakhary
Don Cashdollar
Chuck Lovell

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	Ch.	(Y) 1/				
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	Date: /-/3-03					

- -



Department of Environmental Protection

Jeb Bush Governor Division of Recreation and Parks
District 4 Administration
1843 South Tamiami Trail
Osprey, Florida 34229
December 31, 2002

David B. Struhs Secretary

Damon Doumlele, Environmental Protection Specialist Big Cypress National Preserve HCR 61, Box 110 Ochopee, Florida 34141-9710

Dear Mr. Doumlele:

The Big Cypress National Preserve certainly rates a first class visitor center. The Florida Park Service is in full agreement with the concept and with the location that is being proposed. Thank you for including our agency in the scoping process. We look forward to reviewing the "Draft" Environmental Assessment upon its completion. Since this project has multi-agency aspects, we would ask for two considerations: (1) that one of your exhibits be a map showing the Fakahatchee Strand State Preserve State Park in relation to the Big Cypress National Preserve and (2) that state preserve brochures and other state preserve literature (if there should ever be any of the latter) be available to visitors.

Sincerely,

Michael K. Murphy, Chief Bureau of Parks, District 4

MKM/ka/jm

cc:

Mr. John J. Donahue

Ms. Wendy Spencer

Mr. Ed Higgins

Mr. Al Gregory

Mr. Greg Toppin

file



United States Department of the Interior-

FISH AND WILDLIFE SERVICE South Florida Ecological Services Office 1339 20th Street Vero Beach, Florida 32960



December 19, 2002

John J. Donahue, Superintendent National Park Service Big Cypress National Preserve HCR 61 Box 110 Ochopee, Florida 34141

Dear Mr. Donahue:

The Fish and Wildlife Service (Service) has reviewed the information in your October 7, 2002, letter and attachments. Your letter requested our consultation in accordance with section 7 of the Endangered Species Act (ESA) of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.) for the proposed interagency welcome center.

The welcome center is proposed for a parcel of land to the west of the existing headquarters building in Ochopee. You indicated that the National Park Service (NPS) is preparing an Environmental Assessment which will review the preferred location and an alternate location to the east of the existing headquarters building. The welcome center and associated parking and other amenities will cover approximately four acres.

The Service is familiar with the proposed location of the site. It is a scarified location adjacent to a canal. From casual observation during visits to headquarters, Service staff have noted the lack of native plant communities in this area. The alternate site, however, does support some native plant species. From the attachments, included in your letter, it appears that the preferred site would be the best location for this type of infrastructure. In addition, it would provide outreach opportunities not currently present in this area of Collier County.

In your letter, you determined that the proposed construction on the preferred site is not likely to adversely affect federally listed threatened or endangered species. While insufficient information to constitute a complete initiation package, as identified in 50 CFR § 402.14, has been presented, we believe the Environmental Assessment being prepared will contain sufficient information to concur with your determination, or request initiation of formal consultation on the proposed activity.

Service staff is available to review a draft Environmental Assessment and provide comments on the sufficiency of the biological evaluation or assessment contained within it. We will provide our concurrence or request for initiation of formal consultation at that time.

:

John J. Donahue December 19, 2002 Page 2

Thank you for the opportunity to provide assistance with NPS's planning efforts, we look forward to continued coordination between our agencies. If you have questions, please contact Jane Tutton at (772) 562-3909, extension 235.

Sincerely yours,

Linda S. Ferrell

Assistant Field Supervisor

Jelly D. Well

South Florida Ecological Services Office

cc:

BCNP, Ochopee, Florida (Ron Clark) BCNP, Ochopee, Florida (Deborah Jansen) Service, Naples, Florida Service, FPNWR, Naples, Florida Brian Scherf, Hollywood, Florida DIVISIONS OF FLORIDA DEPARTMENT OF STATE

Office of the Secretary
Office of International Relations

Office of International Relations
Division of Elections

Division of Corporations
Division of Cultural Affairs

Division of Historical Resources

ivision of Library and Information Services

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Siting Board

Division of Bond Finance Department of Revenue

Department of Law Enforcement Department of Highway Safety and Motor Vehicles Department of Veterans' Affairs

NU/ 04 2002

Shellie/Ivrailroom

Chattanan

October 31, 2002

Jim Smith
Secretary of State
DIVISION OF HISTORICAL RESOURCES

FLORIDA DEPARTMENT OF STATE

Mr. John J. Donahue
United States Departments of the Interior
National Park Service
Big Cypress National Preserve
HCR 61, Box 110
Ochopee, Florida 34141-9710

RE:

DHR Project File No. 2002-9332

Received by DHR October 9, 2002

Proposed Inter-Agency Welcome/Visitor Information Center Along US 41

Big Cypress National Preserve, Dade County, Florida

Dear Mr. Donahue:

Our office received and reviewed the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended and 36 CFR Part 800: Protection of Historic Properties. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing, in the National Register of Historic Places), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

We have reviewed the Florida Master Site File and our records and no historic properties are known to exist in the area of potential effect. Therefore, based on the information provided, it is the opinion of the office that the proposed undertaking will have no effect on historic properties.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservation Planner, by electronic mail *sedwards@mail.dos.state.fl.us*, or at 850-245-6333 or 800-847-7278.

Sincerely,

Janet Snyder Matthews, Ph.D., Director, and

State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • http://www.fiheritage.com

APPENDIX B

BIG CYPRESS NATIONAL PRESERVE WELCOME CENTER OBSERVED SPECIES LIST

BIG CYPRESS NATIONAL PRESERVE WELCOME CENTER OBSERVED SPECIES LIST PREFERRED ALTERNATE SITE

Common Name	Scientific Name	<u>Habitat</u>	Notes
<u>FLORA</u>			
Arrowhead	Sagittaria graminea	OBL	
Coastal Plain Willow	Salix caroliniana	OBL	
Coastal Water-hyssop	Bacopa monnieri	OBL	
Common Reed	Phragmites communis	OBL	
Leather Fern	Acrostichum danaeifolium	OBL	
Narrow-leaved Cattail	Typha angustifolia	OBL	
Pond Apple	Annona glabra	OBL	
Red Mangrove	Rhizophora mangle	OBL	
Sawgrass	Cladium jamaicense	OBL	
Seashore/Coastal Dropseed	Sporobolus virginicus	OBL	R
Swamp Hibiscus	Hibiscus grandiflorus	OBL	
Asiatic Pennywort/Coinwort	Centella asiatica	FACW	
Camphor Weed	Pluchea odorata	FACW	
False Buttonweed	Spermacoce sp.	FACW	R
Florida Royal Palm	Roystonea elata	FACW	
Green Buttonwood	Conocarpus erectus	FACW	
Marsh Finger Grass	Eustachys glauca	FACW	R
Marsh Pennywort	Hydrocotyle umbellata	FACW	
Marsh-Pinks	Sabatia grandiflora	FACW	
Mock Bishop's Weed	Ptilimnium capillaceum	FACW	
Morning Glory	Ipomoea sp.	FACW	
Star-Rush	Dichromena colorata	FACW	
Torpedo Grass	Panicum repens	FACW	* ´
Beggar-Ticks	Bidens pilosa	FAC	R
Brazilian Pepper	Schinus terebinthifolius	FAC	*
Cabbage Palm	Sabal palmetto	FAC	
Common Frog-fruit	Phyla nodiflora	FAC	R
Muscadine/Grape	Vitis rotundifolia	FAC	
Myrsine/Rapanea	Myrsine guianensis	FAC	
Poison Ivy	Toxicodendron radicans	FAC	R
Saltbush	Baccharis halimifolia	FAC	
Spiked Gayfeather	Liatris spicata	FAC	
Strangler Fig	Ficus aurea	FAC	
Wax Myrtle	Myrica cerifera	FAC	
Lead Tree	Leucaena leucocephala	FAC/FACU	R*
Saw Palmetto	Serenoa repens	FACU	
Lantana	Lantana camara	FACU/UP	R*
Spanish Bayonet	Yucca aloifolia	FACU/UP	
West Indian Mahogany	Swietenia mahagoni	UP	^
FAUNA			
Barn Swallow	Hirundo rustica		
Common Grackel	Quisicalus quisicula		
Mozambique Tilapia	Tilapia mossambica		*
Peacock Bass	Chichla ocellaris		*
Striped Mullet	Mugil cephalus		
Turkey Vulture	Cathartes aura		
Total: 45 Spacias (20 Plant 6 Anima	(12 D'-1-2 B'-1)		·- !

Total: 45 Species (39 Plant, 6 Animal [3 Birds, 3 Fish])

Based on site survey by Robert T. McMullen, Consulting Engineering & Science, Inc. on May 13, 2003.

ALTERNATE SITE

Bald cypress Buttonbush Cephalanthus occidentalis OBL Ocastal Plain Willow Saltx caroliniana OBL Goldfoot/Serpent Fern Phlebodium aureum OBL Sawgrass Cladium jamaicense OBL Sawgrass Cladium jamaicense OBL Star-Rush Dichromena colorata OBL Water-Primrose Ludwigia sp. OBL Green Buttonwood Conocarpus erectus FACW Rarsh Finger Grass Eustachys glauca FACW Red Maple Acer rubrum FACW Widespread Maiden Fern Yellowtop Flaveria linearis FACW False Buttonweed Spermacoce sp. FACW Raster/Composite Ambrosia trifida FAC Strangler Palm Sabal palmetto FAC Hurricane Grass Fimbristylis spathacea FAC Knotroof Bristlegrass Setaria geniculata FAC Strangler Fig Ficus aurea FAC Wax Myrtle Burd Parallala Sida sp. FACU FAUNA Barn Swallow FILudoruss FACU FAUNA Barn Swallow Fined or stricta FACU FACU FAUNA FACU FAUNA FACI FAUNA FACI FAUNA FACI Finda FAC FACU FAC FACU FAC	Common Name	Scientific Name	<u>Habitat</u>	Notes
Battonyness Cophalanthus occidentalis Coastal Plain Willow Salix caroliniana OBL Goldfoot/Serpent Fern Phlebodium aureum OBL Sawgrass Cladium jamaicense OBL Sheathed Flatsedge Cyperus haspan OBL Star-Rush Dichromena colorata OBL Water-Primrose Dichromena colorata OBL Water-Primrose Ludwigia sp. OBL Green Buttonwood Conocarpus erectus FACW Marsh Finger Grass Eustachys glauca FACW Red Maple Acer rubrum FACW Widespread Maiden Fern Yellowtop Flaveria linearis False Buttonweed Spermacoce sp. FACW Brazilian Pepper Schinus terebinthifolius FAC Sabage Palm FAC Hurricane Grass Fimbristylis spathacea FAC Knotroof Bristlegrass Setaria geniculata FAC Saltbush Baccharis halimifolia FAC Strangler Fig Myrica cerifera FAC Wax Myrtle FACU FACU FACU FACU FACU FACU FACU FACU	FLORA		ODI	
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Goldfoot/Serpent Fern Phlebodium aureum OBL Sawgrass Cladium jamaicense OBL Sheathed Flatsedge Cyperus haspan OBL Star-Rush Dichromena colorata OBL Water-Primrose Ludwigia sp. OBL Green Buttonwood Conocarpus erectus FACW Marsh Finger Grass Eustachys glauca FACW Red Maple Acer rubrum FACW Widespread Maiden Fern Thelypteris kunthii FACW Yellowtop Flaveria linearis FACW False Buttonweed Spernacoce sp. FACW Brazilian Pepper Schims terebinthifolius FAC Knotroof Bristlegrass Findbristylis spathacea FAC Knotroof Bristlegrass Setaria geniculata FAC Saltbush Baccharis halimifolia FAC Strangler Fig Ficus aurea FAC Wax Myrtle Myrica cerifera FAC Blue Porterweed Stachytarpheta jamaicensis FACU FAUNA Barn Swallow Hirundo rustica Common Grackel Quisicalus quisicula Common Grackel Common Killed Red-winged Blackbird Agelaius phoeniceus				
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Red Maple	Green Buttonwood	Conocarpus erectus		
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Lantana Lantana camara FACU/UP R* FAUNA Barn Swallow Hirundo rustica Common Grackel Quisicalus quisicula Common Nighthawk Chordeiles minor Killdeer Charadrius vociferus Red-winged Blackbird Agelaius phoeniceus	•	<u> </u>		
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Common Nighthawk Chordeiles minor Killdeer Charadrius vociferus Red-winged Blackbird Agelaius phoeniceus	Common Grackel	Ouisicalus auisicula		
Killdeer Charadrius vociferus Red-winged Blackbird Agelaius phoeniceus				
Red-winged Blackbird Agelaius phoeniceus				
Tirkey Viiliire Culturles aura	Turkey Vulture	Cathartes aura		

Total: 33 Species (27 Plants, 6 Birds)

Key

Ruderal	R	Obligate Wetland Species	OBL
Florida Threatened Species	T	Facultative Wetland Species	FACW
Florida Endangered Species	^	Facultative	FAC
Exotic/Invasive	*	Facultative Upland Species	FACU
		Upland Species	UP

Based on site survey by Robert T. McMullen, Consulting Engineering & Science, Inc. on May 13, 2003.





As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

NPS D-138 / August 2003